

UNIVERSITY OF CALIFORNIA
HASTINGS COLLEGE OF THE LAW

EF City Planning

GOLDEN GATE BUILDING

DRAFT

ENVIRONMENTAL IMPACT REPORT

DOCUMENTS DEPT.

MAR 11 1986

SAN FRANCISCO
PUBLIC LIBRARY

PUBLICATION DATE: MARCH 7, 1986

PUBLIC HEARING DATE: APRIL 4, 1986

PUBLIC COMMENT PERIOD: MARCH 7, 1986 TO APRIL 23, 1986

WRITTEN COMMENTS SHOULD BE SENT TO:

OFFICE OF THE DEAN

UNIVERSITY OF CALIFORNIA

HASTINGS COLLEGE OF THE LAW

McALLISTER STREET, SAN FRANCISCO, CALIFORNIA 94102

D
REF
711.57
G565

SAN FRANCISCO PUBLIC LIBRARY



3 1223 03557 6157



5/S

SAN FRANCISCO
PUBLIC LIBRARY

REFERENCE
BOOK

Not to be taken from the Library

1. Project Title: Golden Gate Building
 2. Lead Agency: University of California
~~Hastings College of the Law~~
 3. Contact Person: Tricia A. Dolter
 3a. Street Address: 200 McAllister St.
 3b. City: San Francisco
 3c. County: San Francisco
 3d. Zip: 94102
 3e. Phone: [415] 565-4701

PROJECT LOCATION 4. County: San Francisco 4a. City/Community: San Francisco

4b. Assessor's Parcel No. 347 4c. Section Lots 10-15 Twp. _____ Range _____

5a. Cross Streets: Golden Gate and Larkin 5b. For Rural, Nearest Community: _____

6. Within 2 miles: a. State Hwy # 101 & 80 b. Air-ports _____ c. Rail-ways _____ d. Water-ways _____

7. DOCUMENT TYPE		8. LOCAL ACTION TYPE		9. DEVELOPMENT TYPE	
<u>CEQA</u>		01. <u>General Plan Update</u>		01. <u>Residential: Units</u> _____ <u>Acres</u> _____	
01. <u>NOP</u>	06. <u>NOE</u>	02. <u>New Element</u>		02. <u>X Office: Sq. Ft.</u> <u>160,530 gsf</u>	
02. <u>Early Cons</u>	07. <u>NOC</u>	03. <u>General Plan Amendment</u>		<u>Acres</u> _____ <u>Employees</u> <u>apprx. 990</u>	
03. <u>Neg Dec</u>	08. <u>NOD</u>	04. <u>Master Plan</u>		03. <u>Shopping/Commercial: Sq. Ft.</u> _____	
04. <u>X Draft EIR</u>		05. <u>Annexation</u>		<u>Acres</u> _____ <u>Employees</u> _____	
05. <u>Supplement/ Subsequent EIR</u> (Prior SCH No.: _____)		06. <u>Specific Plan</u>		04. <u>Industrial: Sq. Ft.</u> _____	
		07. <u>Community Plan</u>		<u>Acres</u> _____ <u>Employees</u> _____	
		08. <u>Redevelopment</u>		05. <u>Water Facilities: MGD</u> _____	
<u>NEPA</u>		09. <u>Rezone</u>		06. <u>Transportation: Type</u> _____	
09. <u>NOI</u>	11. <u>Draft EIS</u>	10. <u>Land Division</u> (Subdivision, Parcel Map, Tract Map, etc.)		07. <u>Mining: Mineral</u> _____	
10. <u>FOESI</u>	12. <u>EA</u>	11. <u>Use Permit</u>		08. <u>Power: Type</u> _____ <u>Watts</u> _____	
<u>OTHER</u>		12. <u>Waste Mgmt Plan</u>		09. <u>Waste Treatment: Type</u> _____	
13. <u>Joint Document</u>		13. <u>Cancel Ag Preserve</u>		10. <u>OCS Related</u> _____	
14. <u>Final Document</u>		14. <u>Other</u> _____		11. <u>Other:</u> _____	
15. <u>Other</u> _____					

10. TOTAL ACRES: _____

11. TOTAL JOBS CREATED: _____

12. PROJECT ISSUES DISCUSSED IN DOCUMENT

01. <u>X Aesthetic/Visual</u>	08. <u>Flooding/Drainage</u>	15. <u>Septic Systems</u>	23. <u>Water Quality</u>
02. <u>Agricultural Land</u>	09. <u>Geologic/Seismic</u>	16. <u>Sewer Capacity</u>	24. <u>Water Supply</u>
03. <u>X Air Quality</u>	10. <u>X Jobs/Housing Balance</u>	17. <u>Social</u>	25. <u>Wetland/Riparian</u>
04. <u>X Archaeological/Historical</u>	11. <u>Minerals</u>	18. <u>Soil Erosion</u>	26. <u>Wildlife</u>
05. <u>Coastal Zone</u>	12. <u>X Noise</u>	19. <u>Solid Waste</u>	27. <u>X Growth Inducing</u>
06. <u>Economic</u>	13. <u>Public Services</u>	20. <u>Toxic/Hazardous</u>	28. <u>X Incompatible Landuse</u>
07. <u>Fire Hazard</u>	14. <u>Schools</u>	21. <u>X Traffic/Circulation</u>	29. <u>X Cumulative Effects</u>
		22. <u>Vegetation</u>	30. <u>Other</u> _____

13. FUNDING (approx) Federal \$ _____ State \$ _____ Total \$ _____

14. PRESENT LAND USE AND ZONING: Commercial, office, educational and public parking.
Zoning is C-3-G (Downtown General Commercial).

15. PROJECT DESCRIPTION: The University of California, Hastings College of the Law, proposes to construct a 6-story, 80-foot project for educational and governmental use, including offices on a 37,812.5 sq. ft. site owned by Hastings College of the Law. The building would have 160,530 gsf of educational and governmental space, including offices, about 67,000 gsf of below ground parking, about 5,000 gsf of restaurant space and about 1,280 gsf of retail space. The project includes about 4,100 sq. ft. of on-site open space and an additional buffer area on the southern perimeter.

16. SIGNATURE OF LEAD AGENCY REPRESENTATIVE: [Signature] DATE: March 7, 1986

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in.

D REF 711.57 G565

Golden Gate building,
University of
1986.

S.F. PUBLIC LIBRARY

3 1223 03557 6157

UNIVERSITY OF CALIFORNIA
HASTINGS COLLEGE OF LAW

DATE: March 7, 1986

TO: Distribution List for the
Golden Gate Building EIR

FROM: Dean Bert S. Prunty

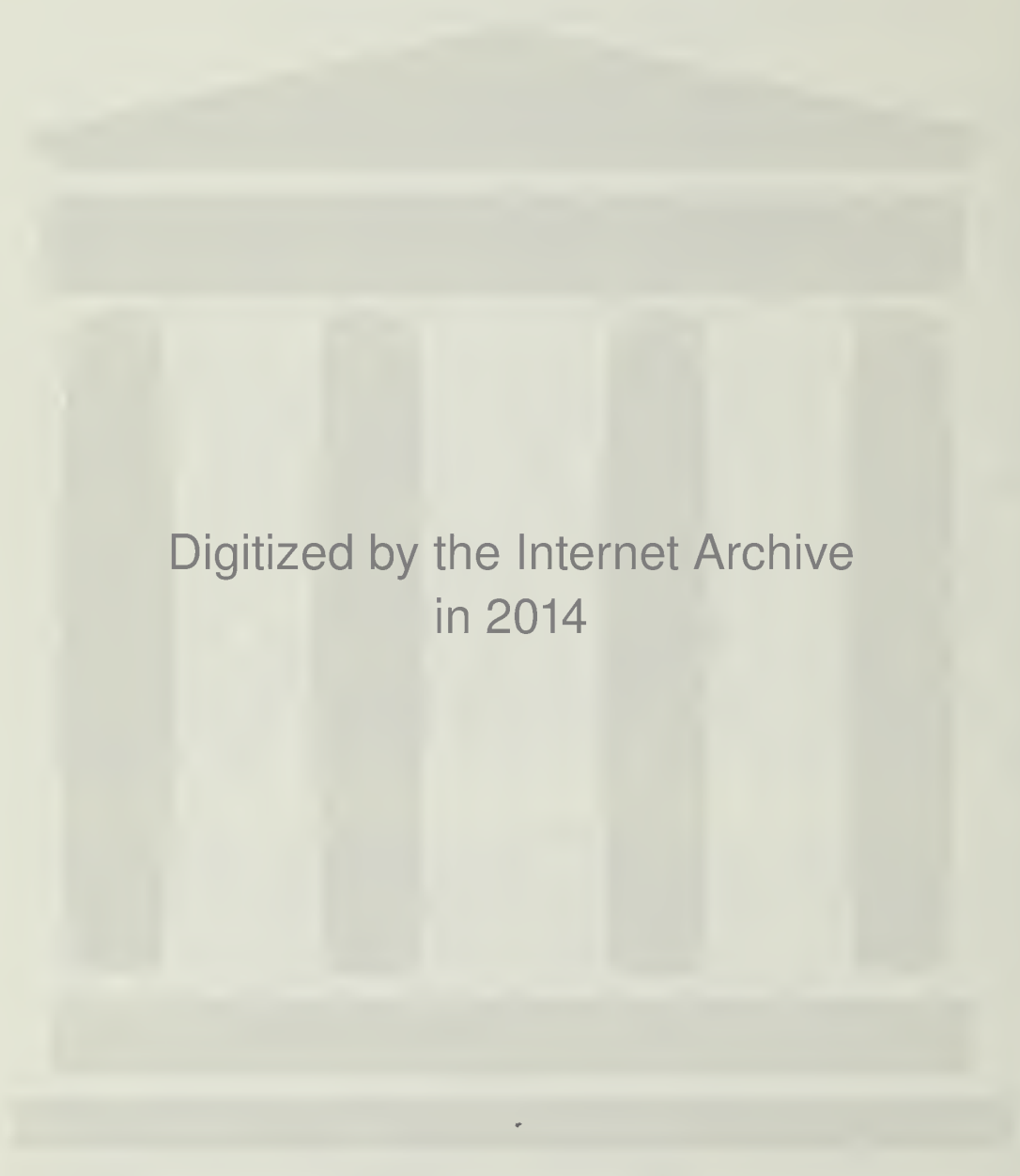
RE: Final Environmental Impact Report for the
Golden Gate Building

This is the Draft Environmental Impact Report for the Golden Gate Building. It has been prepared in accordance with the California Environmental Quality Act and the Amended University of California, Hastings College of the Law, Procedures for Implementation of the California Environmental Quality Act. The purpose of this EIR is to inform College decision makers and the public about the potential significant environmental effects of the proposed project.

A public hearing will be held on the adequacy and accuracy of this document on April 4, 1986. After the public hearing and the close of the public comment period, General Services will prepare and publish a document titled "Summary of Comments and Responses." This document will consist of a summary of all comments and recommendations on environmental issues received during the public comment period and will describe the disposition of significant environmental issues raised by the comments. The document may also specify changes or revisions to this Draft EIR. A list of persons, organizations and public agencies commenting on the Draft EIR will also be included. The Draft EIR together with the Summary of Comments and Responses document shall constitute the Final EIR on the proposed project.

The University of California, Hastings College of the Law, as Lead Agency for the proposed project, will use the Final EIR when making its decision whether to proceed with the project, or to consider other actions to achieve project objectives. The College's decision will be stated in a Notice of Determination which will be filed with the State of California, Office of Planning and Research.

This Draft EIR has been prepared by the University of California, Hastings College of the Law in conjunction with the California State and Consumer Services Agency, Shirley R. Chilton, Secretary; Department of General Services, William J. Anthony, Director; Office of Facilities Planning and Development, Loren C. Smith, Chief.



Digitized by the Internet Archive
in 2014

<https://archive.org/details/goldengatebuildi7198hast>

On February 20, 1985 a Notice of Preparation was sent to various State and local governmental agencies. The project as originally contemplated and described in this Notice of Preparation called for the construction of a 10-story, 130-foot structure. However, during the CEQA process the College decided to change the height of the proposed project to 80-feet. Therefore, both the Initial Study and the EIR analyze effects associated with the 80-foot, 6-story project.

UNIVERSITY OF CALIFORNIA
HASTINGS COLLEGE OF THE LAW

GOLDEN GATE BUILDING

DRAFT

ENVIRONMENTAL IMPACT REPORT

PUBLICATION DATE: MARCH 7, 1986

PUBLIC HEARING DATE: APRIL 4, 1986

PUBLIC COMMENT PERIOD: MARCH 7, 1986 TO APRIL 23, 1986

WRITTEN COMMENTS SHOULD BE SENT TO:

OFFICE OF THE DEAN

UNIVERSITY OF CALIFORNIA

HASTINGS COLLEGE OF THE LAW

200 McALLISTER STREET, SAN FRANCISCO, CALIFORNIA 94102

UNIVERSITY OF CALIFORNIA
HASTINGS COLLEGE OF THE LAW
DRAFT EIR

This Draft Environmental Impact Report was prepared by
the following persons:

University of California
Hastings College of the Law
200 McAllister Street
San Francisco, California 94102

Bert S. Prunty
Dean

Patricia A. Dolter
Project Manager

Nancy Aptekar
Assistant Legal Counsel

State of California
Department of General Services
Office of Facilities Planning and Development
1125 - 10th Street
Sacramento, California 95814

James R. Hargrove
Senior Environmental Planner

Roxane Dal Porto
Associate Planner

Ted Kreines, AICP
President Kreines & Kreines
Consultant

TABLE OF CONTENTS

	<u>Page</u>
I. SUMMARY	1
A. Project Description	1
B. Potential Environmental Effects considered in this Document	2
C. Mitigation Measures	6
D. Alternatives	8
E. Community Controversy	10
II. PROJECT DESCRIPTION	11
A. Project Sponsor's Objectives	11
B. Project Location	11
C. Project Characteristics	14
D. Project Schedules and Approval	16
III. ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES	23
A. Land Use and Zoning	23
B. Urban Design and Visual Quality	28
C. Wind and Shadow	32
D. Archaeological and Historical Resources	42
E. Transportation, Circulation and Parking	47
F. Air Quality	68
G. Construction Noise	76
H. Energy	80
I. Employment and Housing Factors	88
IV. GROWTH INDUCEMENT	96
V. RELATIONSHIP BETWEEN EXISTING PLANS AND POLICIES AND THE PROPOSED PROJECT	98
A. State of California San Francisco Facilities Plan	98
B. City of San Francisco Downtown Plan	98
C. Hastings College of the Law Long Range Development Plan	101

	<u>Page</u>
VI. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED	102
VII. RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY	103
VIII. COMMUNITY CONTROVERSY	104
IX. ALTERNATIVES TO THE PROPOSED PROJECT	107
A. No Project	107
B. Six-Story Structure/ No Plaza	108
C. Ten-Story Structure/No Step-Backs on Upper Levels	109
D. Ten-Story Structure/Step Backs on Upper Two Levels	110
X. DISTRIBUTION LIST	113
XI. PREPARATION STAFF	125
XII. APPENDICES	A-1
A. Initial Study	A-3
B. Level of Service Interpretation	A-39
C. Downtown Plan Draft EIR Methodology	A-40
D. Fundamental Concepts of Environmental Noise	A-45
E. Air Quality San Francisco Air Pollutant Summary 1980-1984	A-50

LIST OF TABLES

	<u>Page</u>
1. Project Characteristics	15
2. Project Site Characteristics	15
3. Existing Land Uses On Site	24
4. Muni Ridership Characteristics	50
5. Pedestrian Flow Regimes	52
6. Project Person Trip Generation	55
7. Outbound Regional Auto Demand	57
8. Existing and Projected Peak Hour Service Levels	58
9. Outbound Regional Transit Demand and Service Levels	61
10. Projected Daily Pollutant Emissions	71
11. Projected Worst-Case Carbon Monoxide Concentrations at Selected Intersections	73
12. Typical Commercial-Industrial Noise Levels at 50-feet	77
13. Estimated Project Energy Use	82
14. Project Related Annual Transportation Energy Consumption	84
15. Comparison of Proposed Project with Downtown Plan	99

LIST OF FIGURES

	<u>Page</u>
1. Project Location	12
2. Project Site	13
3. Golden Gate Avenue Elevation	17
4. Larkin Street Elevation	18
5. Site Plan/Ground Floor Plan	19
6. Site Plan/Ground Floor Plan	20
7. Typical Floor Plan	21
8. First Basement Parking Level	22
9. Project Shadow Pattern March	38
10. Project Shadow Pattern June	39
11. Project Shadow Pattern September	40
12. Project Shadow Pattern December	41

I. SUMMARY

A. PROJECT DESCRIPTION

The University of California, Hastings College of the Law proposes to construct a building for educational and governmental purposes, including office space, on the southwest corner of the intersection of Larkin Street and Golden Gate Avenue in the City of San Francisco. The project architects are Skidmore, Owings & Merrill, San Francisco.

The project site encompasses Lots 10, 11, 12, 13, 14 and 15 of Assessor's Block 347 which is bounded by Hyde, Golden Gate, Larkin and McAllister Streets. The 37,812.5 square foot site has four structures currently used for restaurant, retail and educational purposes as well as a two-level parking lot. All of the on-site structures and the parking lot would be demolished for the proposed project.

The project would be 80-feet in height with a mechanical penthouse extending 16-feet above the building. The ground floor would include retail, lobby and restaurant space as well as a conference/meeting room and educational offices. A parking facility would be located on two levels below ground. An open space plaza with landscaping and seating arrangements would be located on the site's eastern perimeter. An additional open space buffer separating the proposed project from the residential units on the site's southern perimeter would be included as a part of the project design.

The proposed project would contain about 6,280 gross square feet of retail and restaurant space on the ground floor and about 160,530 gross square feet of educational and governmental space, including offices. The proposed project would have a gross floor area applicable to the Floor Area Ratio (FAR) of 211,660 square feet, resulting in an on-site FAR of 5.6:1 for the 37,812.5 square foot development site.

The main pedestrian entrance to the proposed project would be two stories in height and centrally located on Golden Gate Avenue. A second pedestrian entrance would be located within a porch connecting the open space plaza on the site's eastern perimeter with the building. Two off-street loading spaces and the entrance to the below ground parking facility would be accessible from Larkin Street.

Demolition of the four on-site structures and the parking lot, scheduled to begin in 1986, would take about four weeks. Excavation and construction would then continue for an estimated 20 month period until project completion and full occupancy in 1988.

B. POTENTIAL ENVIRONMENTAL EFFECTS CONSIDERED IN THIS DOCUMENT

LAND USE AND ZONING

The project site is in the C-3-G (Downtown General Commercial) Use District. The height and bulk classification is 80-X, with a locally allowed height of 80-feet and no bulk limitations. The proposed project would be compatible with City zoning classifications for the site.

The proposed project would contain about 160,530 gross square feet of governmental and educational space, about 5,000 gsf of restaurant space and 1,280 gsf of retail space. Accompanying project development there would be an increase in intensity of land use of the project site and a corresponding increase in demand for commercial services such as retail and restaurant facilities within the project area.

URBAN DESIGN AND VISUAL QUALITY

At a height of 80 feet, the proposed project would be visible only in the short to mid-range views. In the short-range, views of the project would blend with the nearby State Building on Golden Gate Avenue and the College Law Library. In the mid-range view, the project would be visible from portions of the Civic Center Plaza located to the south of the project site. Due to the similar height of other nearby structures, only the upper levels of the proposed project would be visible from top floors of the San Francisco City Hall.

Facade materials used in the project would be an architectural precast similar in color and finish to the College Law Library. Canopies or awnings would be located above the ground floor clear glass windows which will add to the pedestrian scale. Project design would include a three-part composition with a base (ground floor/service level and second floor), a middle section (office floors three through five), and a top (office floor six with terrace/planter setbacks along a portion of the two long sides of the building).

The building would be set back about 12.5 feet from the southern lot line in order to provide an open space buffer separating the project from the residential units located on the site's southern perimeter. The buffer area would be landscaped with trees and shrubbery.

An additional open space plaza would extend along the site's eastern perimeter. This plaza would connect with the sculpture garden adjacent to the College Law Library and would extend the entire distance from Golden Gate Avenue to McAllister Street. Landscaping and seating arrangements would be included within this plaza.

WIND AND SHADOW

The proposed project would not shade any properties under the jurisdiction of the Recreation and Park Commission. During fall, winter and spring months in morning hours, the project would cast shade on sidewalk areas bordering the site on Golden Gate Avenue and Larkin Street. By 12:00 noon, shadows cast by the proposed project on sidewalk areas across Larkin Street from the project site would be eliminated. Other than during winter months, shade cast on sidewalk areas across Golden Gate Avenue from the site would be eliminated in afternoon hours. In addition, during morning hours of winter months shade will be cast on about 2% of the Federal Building's plaza area located diagonally across Golden Gate Avenue from the project site. However, by 12:00 noon all shade cast by the project on the Federal Building Plaza would be eliminated. Throughout the year the proposed project would not cast shade on the residential structures situated on the southern perimeter of the project site.

Wind tunnel tests were performed for 15 locations in, and adjacent to, the project site. Without the proposed project, two locations in the vicinity of the site are above the 11 miles per hour pedestrian comfort level. These locations include the southeast and northeast corners of the intersection of Larkin Street and Golden Gate Avenue. Upon project completion, only one of these locations, the northeast corner of Larkin and Golden Gate, would remain above the 11.0 pedestrian comfort criterion level. This location would remain constant at the existing wind speed level of 11.2 miles per hour. One location within the plaza area to be constructed adjacent to the project would slightly exceed the 7 miles per hour sitting area comfort criterion. However, the careful placement of landscaping within the plaza area would reduce wind speeds.

ARCHAEOLOGICAL AND HISTORICAL RESOURCES

The project would require demolition of four structures, none of which are included in the 1976 San Francisco Department of City Planning Architectural Survey. Three of the existing on-site structures are rated "D" and one structure is rated "C" by the Foundation for San Francisco's Architectural Heritage. Archival research for the site suggests the possibility that cultural resources from the Prehistoric, Gold Rush and American periods may be present.

TRANSPORTATION, CIRCULATION AND PARKING

Sidewalk detours and curb lane closures on Golden Gate Avenue and Larkin Street adjacent to the project site would be required during project construction. Demolition and excavation would generate about 30 to 35 truck trips per day.

On the basis of land use, the project would generate about 4,766 person trip-ends per day. About 788 of these trips would occur during the p.m. peak period and about 497 trips would occur during the p.m. peak hour.

The proposed project would replace the 180 currently existing on site parking spaces with a 160 space below ground parking facility. The proposed project would generate demand for about 131 long-term parking spaces and 20 short-term spaces. Assuming the demand for all of the existing on-site spaces would remain, the project would result in a net deficit of 171 off-street parking spaces.

Demand from the proposed project would generate about 496 p.m. peak period transit trips, with about 301 of these trips occurring during the p.m. peak hour. The transit demand would be between 0.06 to 0.70% of the total peak-hour travel demand on the individual transit carriers in the year 2000 depending on the transit mode (e.g. Muni, BART, Sam Trans, etc.).

The project would provide two off-street loading spaces and a delivery dock accessible from Larkin Street. At full operation, it is estimated that about 10 to 15 truck visits would be made daily to the project site between the hours of 8:00 a.m. to 5:00 p.m.

AIR QUALITY

Although project-related vehicular traffic will add to cumulative regional pollutant emissions, the project itself, as well as project-generated vehicular traffic,

will not cause violations of the State or Federal 8-hour average carbon monoxide standards for vehicular emissions at the intersections of Larkin and Golden Gate, Hyde and Golden Gate, and Larkin and McAllister Streets. Project-related traffic would account for approximately 0.4% of the anticipated 1990 CO emissions generated in the C-3 Downtown Plan area and an infinitesimal portion of the total daily Bay Area emissions of CO in 1990. Project-generated traffic would also generate approximately 0.2-0.4% of the total daily emission from the Downtown Plan area of hydrocarbons and nitrogen oxides.

CONSTRUCTION NOISE

During the project construction period, noise levels would be increased in the vicinity of the site. Construction noise levels would fluctuate depending on the construction phase, equipment type and duration of use, the distance between the noise source and the listener, and whether barriers were present between the source and the listener.

It is probable that pile drivers would be required during the construction period. If pile drivers are required, noise levels within the commercial-residential structures opposite the project site on Golden Gate Avenue would be expected to reach 92 dBA with windows open and 82 dBA with windows closed. Noise levels within the residential units located on the site's southern perimeter and the College Law Library on the eastern perimeter would reach about 95 dBA with windows open and about 85 dBA with windows closed. Noise levels within the State Building located at 455 Golden Gate Avenue would reach about 82 dBA with windows closed.

ENERGY

The demolition and removal of existing on-site structures would require an unknown amount of energy. Project construction, including fabrication, transportation of building materials and workers as well as site development would require about 380 billion Btu of energy in the form of gasoline, electricity, natural gas and diesel fuel. Upon project completion, the total estimated annual energy use would be about 25 billion Btu. The total project-related annual transportation energy consumption is estimated to be about 26 million Btu.

The proposed project will either meet or exceed the standards required by Title 24 of the California Administrative Code.

EMPLOYMENT AND HOUSING FACTORS

The proposed project would displace a retail merchandiser, restaurant, parking lot and educational users. The College will work with the on-site educational users to locate satisfactory interim space and it is anticipated that upon project completion these workers would be located within the project. The proposed project would include retail and restaurant space which would provide similar replacement jobs for retail, restaurant and facility workers. Upon project completion, it is estimated that about 900 additional workers would be located within the site.

Demolition, excavation and construction activities are expected to occur over a 21-month period and generate about 183 person-years of employment. The jobs generated by construction activity would create additional Bay Area employment through a multiplier effect. As a result of this effect, about 284 additional person-years of employment would be generated.

It is anticipated that governmental agencies locating within the proposed project would relocate to the site from other locations within the City of San Francisco. It is also probable that these governmental employees will not be vacating their current offices, but instead, the project would provide expansion space to fill the need created by current conditions of overcrowding. Therefore, the increase in employment at the project site does not represent employment which is new to San Francisco.

Because governmental workers would be moving to the project site from dispersed locations throughout the City, no additional demand for housing would occur because it is assumed that these workers will continue to reside in their present locations.

C. MITIGATION MEASURES

-- An open-space plaza would be built on the site's eastern perimeter. Landscaping and seating arrangements would be included within the plaza.

-- An additional open-space buffer area would be built on the site's southern perimeter to separate the residential structures from the increased intensity of land use caused by the proposed project.

-- To lessen light and glare, the project would include non-reflective glass and the plaza areas would utilize non-glare lighting with minimal foot candles.

-- Building materials would be complementary to that used in surrounding similar structures and the exterior cladding would be neutral in hue.

-- An archaeologist will meet with soils engineers and will instruct excavation and foundation crews regarding the potential for discovery of cultural or historical artifacts.

-- Safe and convenient pedestrian walkways would be maintained around the project site during the construction period.

-- Construction traffic would be routed away from heavily travelled streets and construction traffic trips would be scheduled during non-commute hours whenever possible.

-- A transportation system management program would be initiated by the State of California and would include ridesharing programs, carpools and vanpools, flex-time and staggered work hours, on-site transit services and installation of bicycle parking.

-- Soil and demolition materials would be watered twice daily to reduce dust caused by construction activities.

-- Impact tools would have intake and exhaust muffled. The project contractor would be required to muffle and shield intakes and exhaust, shroud or shield impact tools and use electric-powered rather than diesel-powered construction equipment, as feasible, so that noise emissions from equipment other than impact tools would be limited to 80 dBA at a distance of 100 feet.

-- If pile-driving is required, the general contractor would pre-drill pile holes.

-- Barriers would be constructed around the project site and around stationary equipment to reduce construction noise by as much as 5 dBA.

-- Construction activities would be limited to the hours between 7:00 a.m. and 8:00 p.m.

-- See this EIR, Appendix A, Initial Study for an additional discussion of mitigation measures which would be implemented as a part of the project design.

D. ALTERNATIVES

Alternative A: No Project

This alternative involves no change to the project site as it currently exists. Four structures and the two level parking lot would remain presumably in current use and condition. Future options for development of the site would remain open. The College has rejected this alternative because needed space for educational and governmental functions would not be built and the most efficient land use of the site would not be achieved.

Alternative B: Six-Story Structure/No Plaza

A six-story structure extending to all lot lines would be developed on the project site. The structure would be used for educational and governmental space, including offices. Total building area would be about 281,000 square feet. Transportation, circulation, parking, employment, air quality and energy impacts would be proportionately greater than those of the proposed project. This alternative was rejected because an open space plaza on the eastern lot line and an additional open space buffer separating the project from the residential units on the site's southern perimeter would not be built.

Alternative C: Ten-Story Structure without Step-Backs and Roof Terraces

This alternative consists of a 10-story, 130-foot building extending to northern and western lot lines. An open space plaza would be located on the eastern and southern site perimeters. A parking facility would be located on two levels below ground. Ground floor use would include restaurant, retail, conference/meeting room and educational space. Upper floors of the building would be used for educational and governmental space, including offices. Total building area would be about 280,000 square feet and impacts other than wind and shade would be similar to those described for Alternative B, above. Wind speeds would range from 4.8 to 13.7 miles per hour. Shadow impacts would be increased on Golden Gate Avenue throughout the fall, winter and spring months.

The College has rejected this alternative because the predicted wind speed at the northeast corner of the intersection of Golden Gate and Larkin would reach 13.7 miles per hour.

**Alternative D: 10-Story Structure with Step-Backs
and Roof Terraces on the Upper Two
Floors**

This alternative consists of a 10-story structure, 130-feet in height. The building would extend to northern and western lot lines and an open space plaza would be located on the site's eastern and southern perimeters. The plaza would extend 64 feet from the building to the College Law Library on the east and would extend 27.5 feet to the residential units on the south. This project is similar to Alternative C, above. However, the upper two floors would include step-backs and roof terraces, shaping the structure at its top. Total building area would be about 264,000 square feet.

Through the creation of step-backs and roof terraces on floors 9 and 10, wind speed at the northeast corner of Larkin and Golden Gate would be reduced from 13.7 miles per hour to 11.8 miles per hour. This alternative exceeds the City's height limitation for the project site by 50 feet. Other potential significant impacts associated with this alternative would be reduced to an insignificant level through mitigation measures. Plaza areas adjacent to the eastern and southern site perimeters would be larger than open space areas associated with the proposed project. Although the College considers this alternative to be the preferred project, in a spirit of cooperation with the City of San Francisco, this alternative was rejected.

E. COMMUNITY CONTROVERSY

The main area of controversy centers around the use of the project site for governmental and educational, instead of residential, purposes. The structures located on Lots 12 and 14 of the project site served as residential hotels in past years. In the late 1970s the College wanted to close the hotels for residential purposes because they were unsafe and in a condition of disrepair.

The movement of persons from Lots 12 and 14 is the subject of current litigation, McKeon, et. al. v. Hastings College of the Law. A judgment was issued in this case against the College by the Superior Court of the City and County of San Francisco on July 2, 1982. Although the College removed 85 uninhabitable units from the market while providing 90 additional residential units, the trial court judgment stated that the College must provide an additional 375 units of comparable replacement housing. This judgment is currently on appeal and at such time as the appellate process is completed the College will abide by the decision. At no time, however, was the College required to provide housing units on the site of the proposed project. The College has examined the feasibility of rebuilding the structures located on Lots 12 and 14 to provide housing. This possibility was rejected because it was economically prohibitive and would not carry out the objectives of the proposed project.

II. PROJECT DESCRIPTION

A. PROJECT SPONSOR'S OBJECTIVES

The University of California, Hastings College of the Law proposes to construct a 6-story, 80-foot building for educational and governmental use, including office space, at the southeast corner of Larkin Street and Golden Gate Avenue in San Francisco. It is the objective of the College to develop needed space for educational functions while at the same time utilizing College owned property situated in a prime location adjacent to the San Francisco Civic Center to further State and local goals of consolidating governmental functions within the Civic Center area. Through the leasing of space to governmental agencies, the College would be able to provide additional needed space for educational functions and derive revenues for the College.

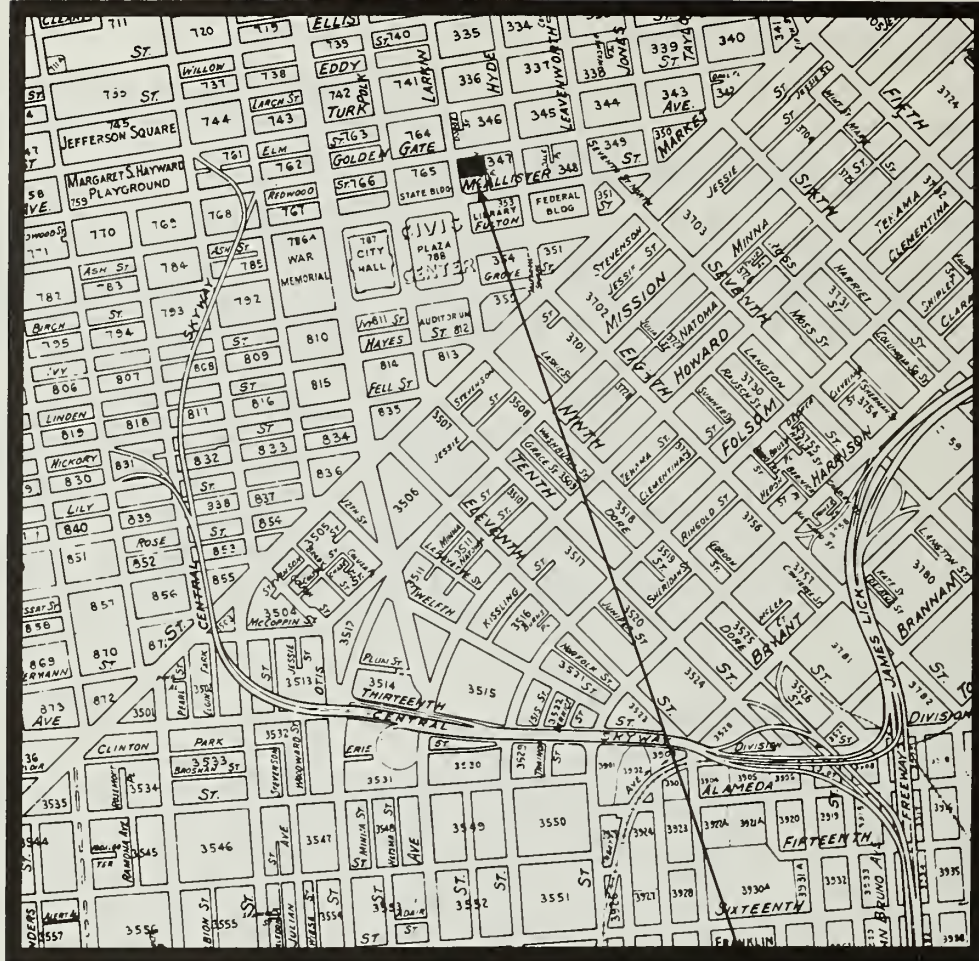
B. PROJECT LOCATION

The project site will encompass Lots 10, 11, 12, 13, 14 and 15 of Assessor's Block 347 which is bounded by Hyde, Golden Gate, Larkin and McAllister Streets. See Figure 1. The 37,812 square foot project site fronts Golden Gate Avenue and Larkin Street. A State Building is situated directly across Larkin Street and a Federal Building is situated diagonally across Golden Gate Avenue from the project site. Residential and commercial uses are located on the site's southern perimeter and directly across Golden Gate Avenue. The proposed project would replace four structures, ranging in height from one to three floors, containing educational, retail and restaurant uses, and vacant space. The project would additionally replace a 176-space parking lot with a two level below ground parking facility. The structures proposed to be demolished are 361-365 Golden Gate Avenue, 355 Golden Gate Avenue, 343-349 Golden Gate Avenue and 333 Golden Gate Avenue.

Although both the owner and probable primary user of the project are not subject to local regulations, the proposed project is compared to land use controls contained in the City of San Francisco, Downtown Plan, in order to determine potential significant effects on the environment. The project site is located in the C-3-G (Downtown General Commercial) Use district. As allowed under the San Francisco Downtown Plan dated October 17, 1985, the basic Floor Area Ratio (FAR) is 6:1. The height and bulk classification is 80-X, with a locally allowed height of 80 feet and no bulk limitations.

REGIONAL LOCATION

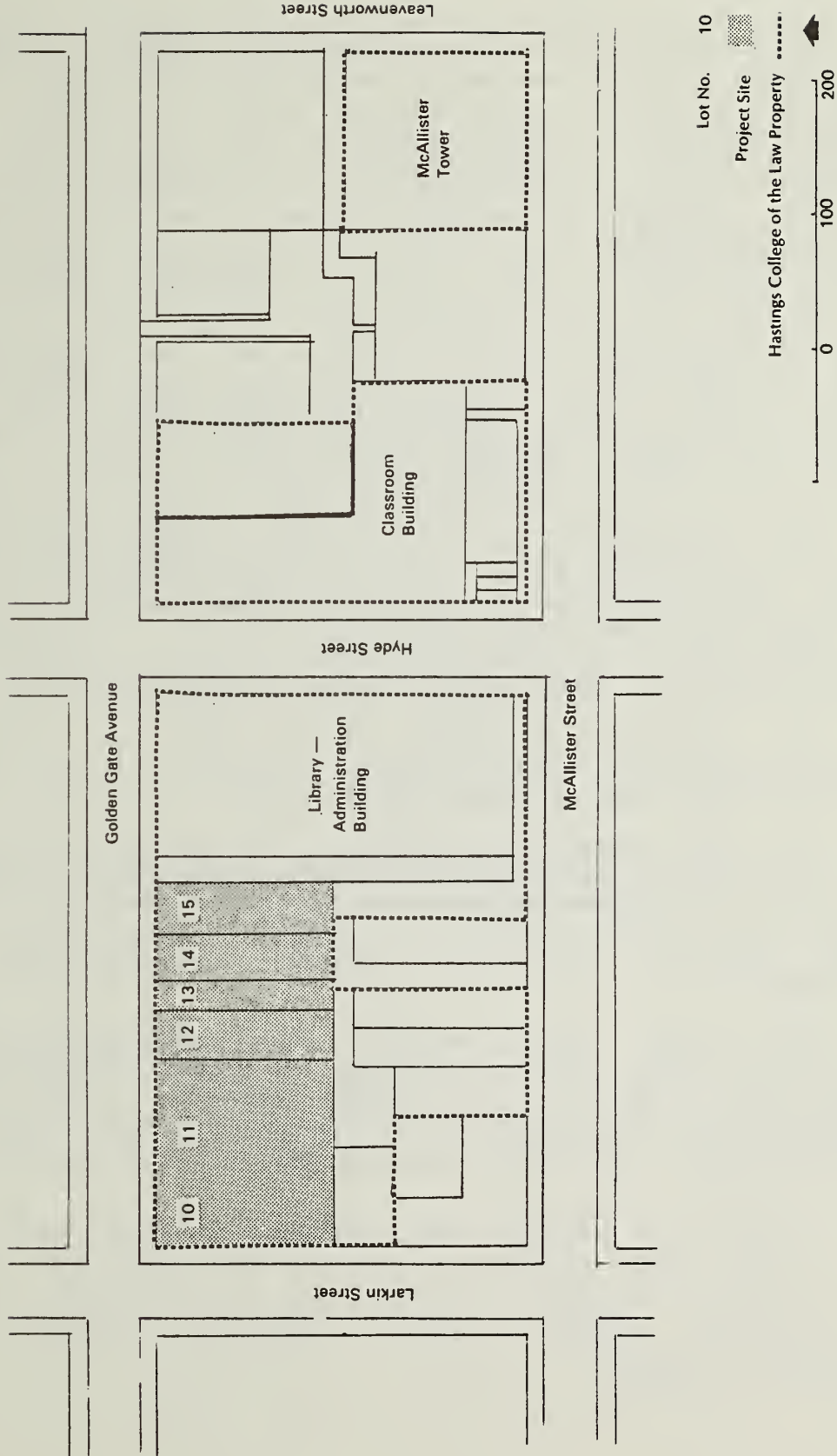
Figure 1



Project Site

PROJECT SITE

Figure 2



C. PROJECT CHARACTERISTICS

The 80-foot project would be six stories in height and would contain a two level below grade parking facility. A mechanical penthouse would extend an additional 16-feet above the project. As calculated under the Downtown Plan, the project would contain about 211,660 gross square feet of floor area; excluding basement space used for services necessary to the maintenance of the building, penthouses and other mechanical equipment necessary to the maintenance of the building, ground floor pedestrian and service uses, ground floor retail and restaurant space, and about 15,900 square feet of accessory parking space equal to seven percent of the proposed gross floor area. This would result in a Floor Area Ratio (FAR), the ratio of the building floor area to the size of the project site, of approximately 5.6:1 for the 37,812.5 square foot development site. The total governmental and educational space, including offices, would be about 160,530 gross square feet. Project characteristics are summarized in Table 1.

The proposed project will contain ground floor lobby, retail and restaurant space as well as a conference/meeting room. Educational space, which is administrative in nature and not classroom space, will be located on portions of the first and second floors. Floors two through six will contain space for governmental uses, including offices.

Two off-street loading spaces would be accessible from Larkin Street. The entrance to the below-ground parking facility would also be from Larkin Street.

The main pedestrian entrance to the building would be two stories in height and centrally located on Golden Gate Avenue. A second pedestrian entrance would be located within a porch two stories in height connecting the open space plaza on the site's eastern perimeter with the building.

The project design would consist of a three part composition with a base containing the ground floor, service level and second floor, a middle section (floors three through five), and the upper portion (floor six) containing terrace/planter setbacks on the two horizontal sides of the building.

Canopies or awnings would be located above the ground floor clear glass windows to add to the pedestrian scale. The windows on floors two through six will be tinted, non-reflective glass. Facade material would be an architectural precast similar in color and finish to the College Law Library.

=====

TABLE 1: PROJECT CHARACTERISTICS

=====

<u>Proposed Floor Area</u>	<u>Area Applicable to FAR under Downtown Plan</u>	<u>Area Excluded from FAR under Downtown Plan</u>
Two-level below ground parking facility	51,130 sq. ft.	15,900 sq. ft. (amount equal to 7% of proposed gross floor area)
Restaurant	--	5,000 sq. ft.
Retail	--	1,280 sq. ft.
Educational and governmental space, including offices	160,530 sq. ft.	--
Totals	211,660 sq. ft.	22,180 sq. ft.

=====

=====

TABLE 2: PROJECT SITE CHARACTERISTICS

=====

Site Dimensions	275 x 137.5	=	37,812.5 sq. ft.
FAR as permitted under Downtown Plan	6:1	=	226,875 sq. ft.
Project FAR	5.6:1	=	211,660 sq. ft.

=====

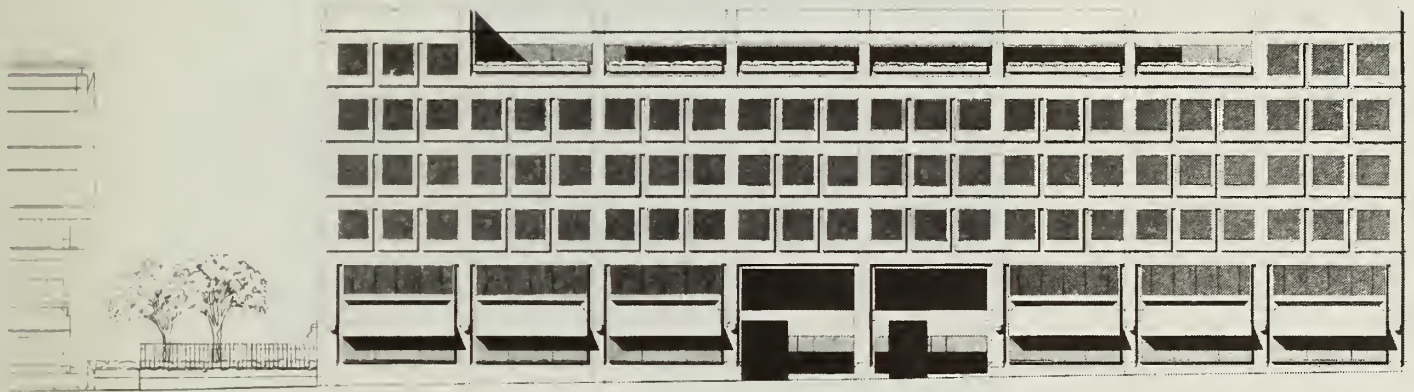
The building will be set back about 12.5 feet from the southern lot line in order to provide an open space buffer separating the project from the residential units located on the site's southern perimeter. An open space plaza with controlled hours will extend along the site's eastern perimeter. This plaza will connect with the sculpture garden adjacent to the College Library and will extend the full distance from Golden Gate Avenue to McAllister Street. The plaza area on the project site would comprise about 4,100 square feet. However, the entire plaza area including the garden currently existing adjacent to the College Library and the plaza extension to McAllister Street would be about 13,000 square feet. Landscaping and seating arrangements will be included within the plaza.

D. PROJECT SCHEDULES AND APPROVAL

Demolition, excavation and construction activities are expected to occur over a 21 to 24 month period, beginning in 1986 and ending in 1988.

The first step in processing the proposed project is a public review of the Draft EIR. Following the 45-day public review period and the public hearing on this Draft EIR, the College, as Lead Agency for the project, will prepare the Final EIR. The Final EIR for the project will consist of the Draft EIR or revision of the Draft EIR, the comments and recommendations received through the public review process either verbatim or in summary, the College's responses to significant environmental points raised during the public review process and a list of persons, organizations and public agencies commenting on the Draft EIR. The Final EIR will be made available for public review before a decision on the project is made. The project will not be approved or carried out if the completed Final EIR identifies one or more significant environmental effects resulting from the project unless findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding is made in writing. The College will certify that the EIR has been prepared in compliance with the California Environmental Quality Act and has been considered in the decision making process (pursuant to Public Resources Code Section 21108). The College's decision to proceed with the project or to consider other actions that would achieve project objectives will be stated in a Notice of Determination filed with the State of California, Office of Planning and Research.

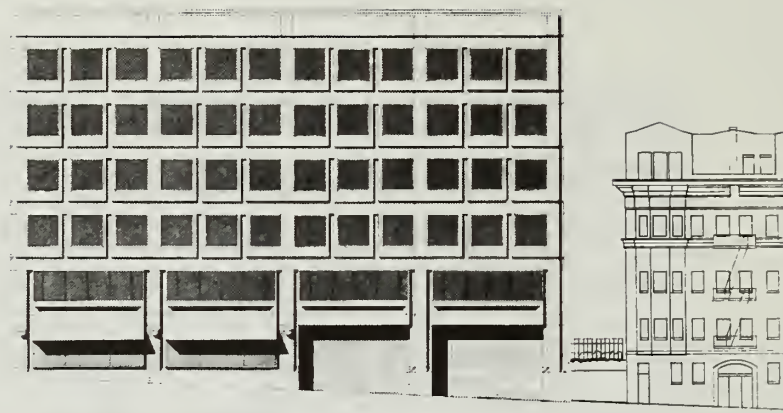
This Environmental Impact Report is intended to be used by the College in its decision making process and to provide the College and the public with detailed information on the environmental consequences of the proposed project as well as feasible mitigation measures which would reduce potential significant impacts to an insignificant level.



GOLDEN GATE AVENUE ELEVATION



Figure 3. Golden Gate Avenue Elevation.



LARKIN STREET ELEVATION

0 5 10 25 30

Figure 4. Larkin Street Elevation.

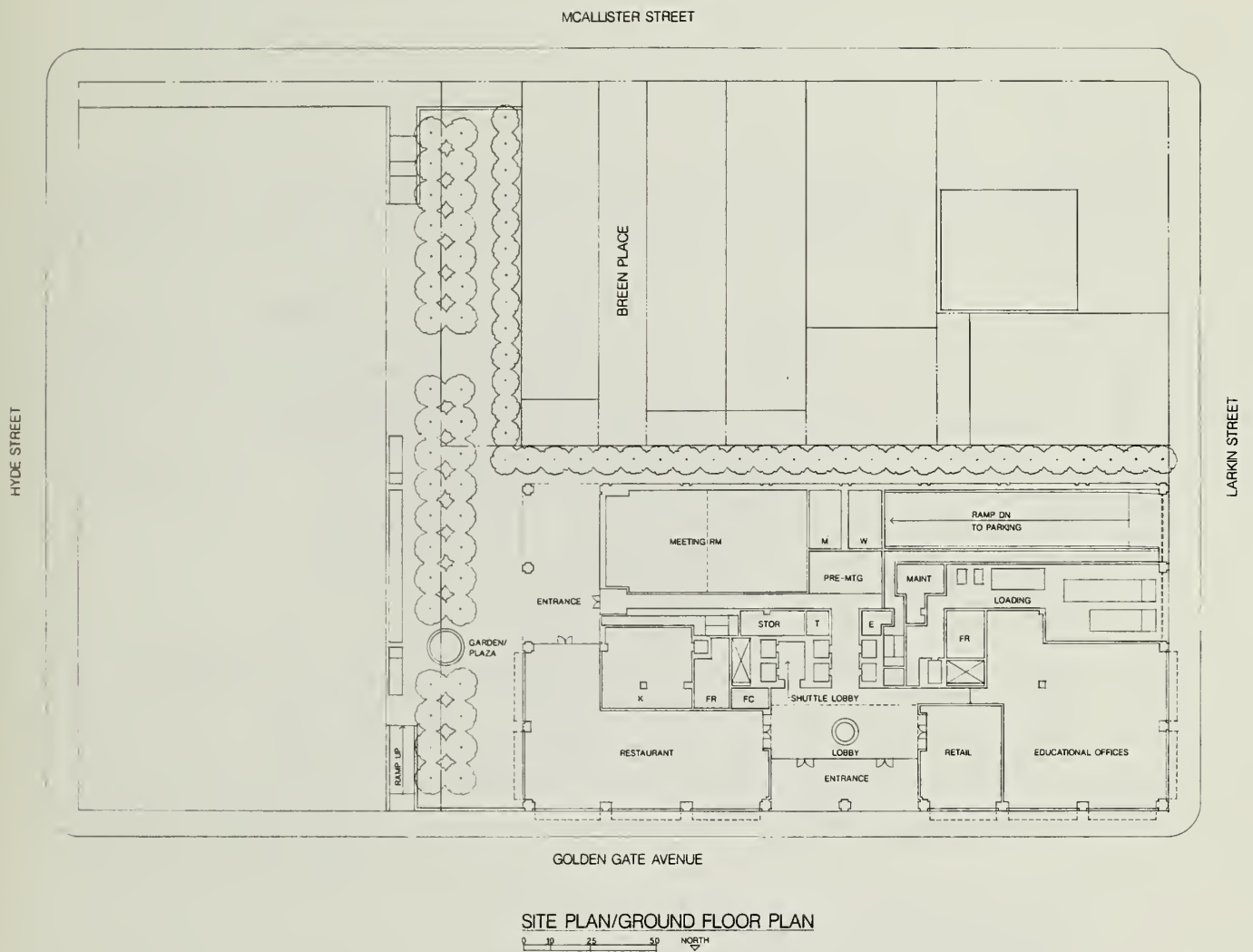


Figure 5. Site Plan/Ground Floor Plan.

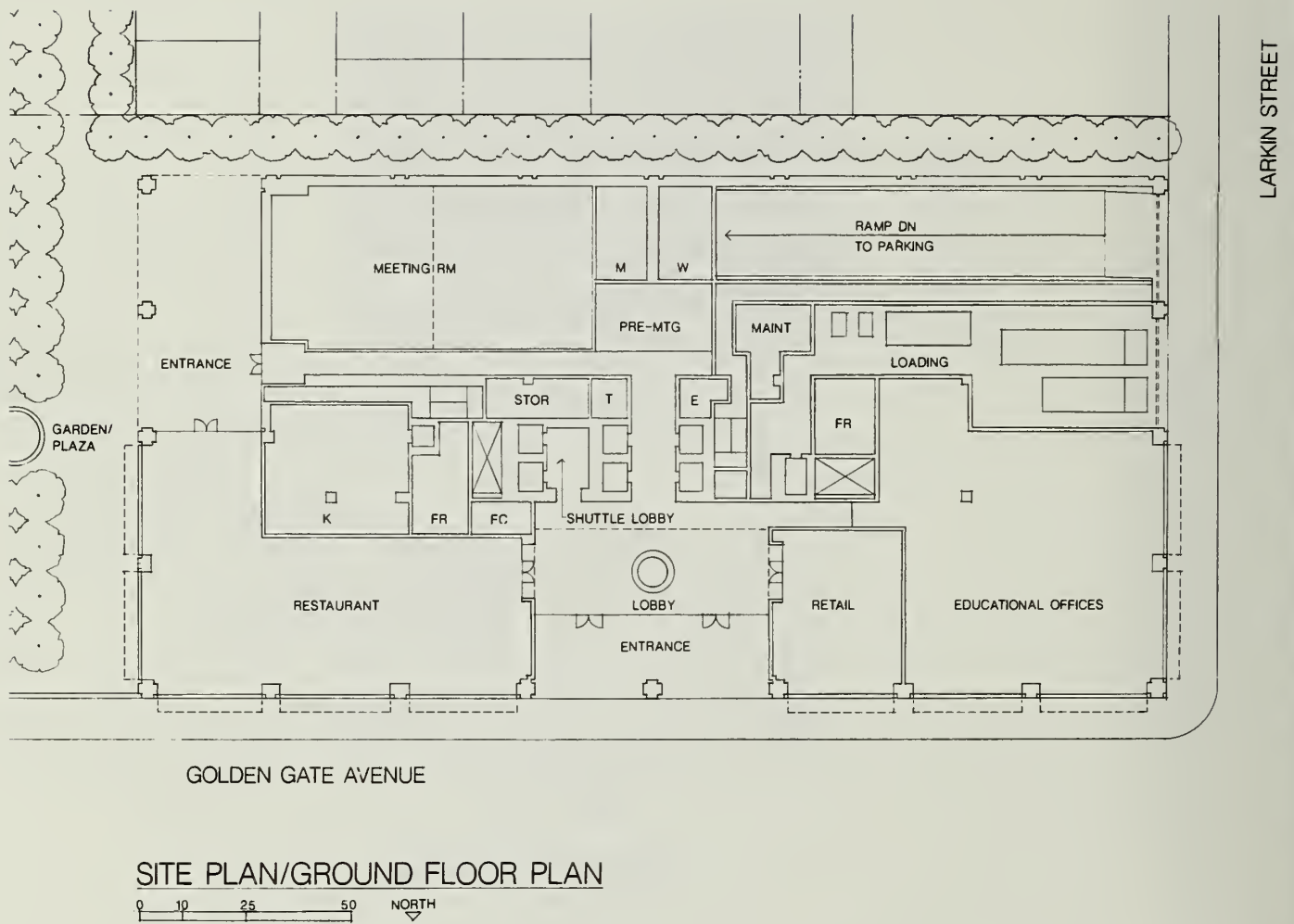


Figure 6. Site Plan/Ground Floor Plan.

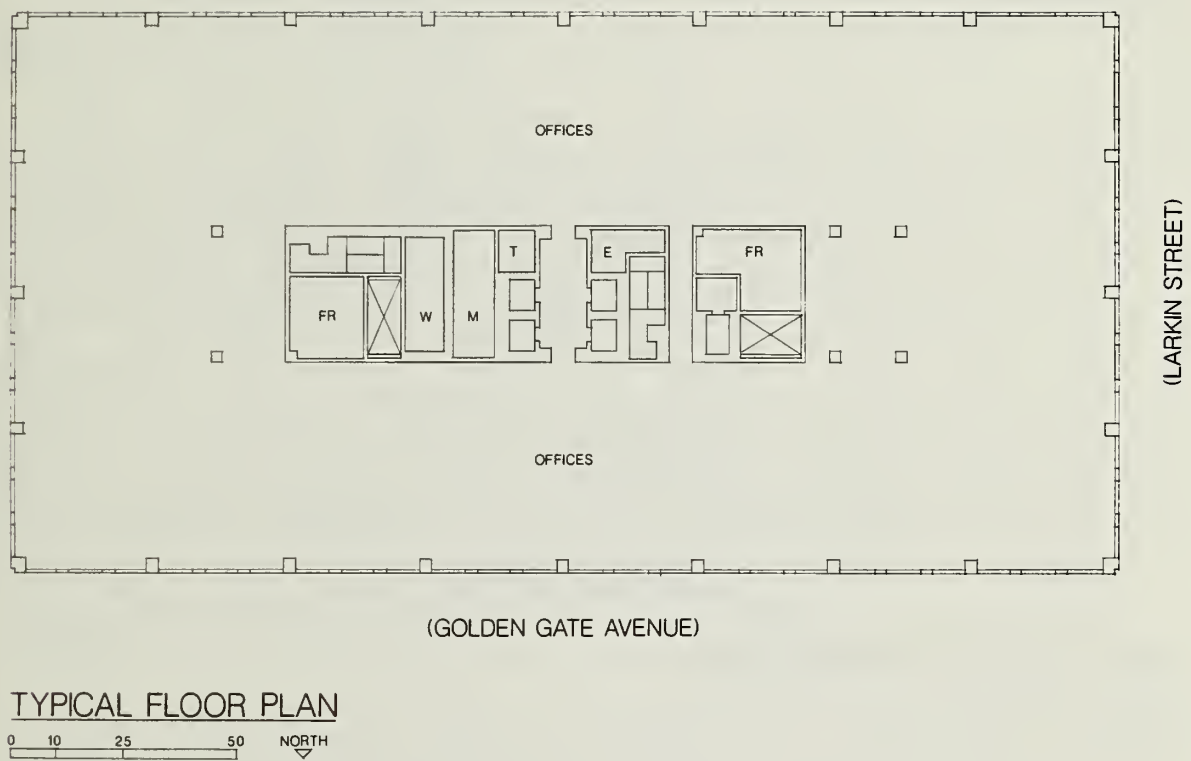
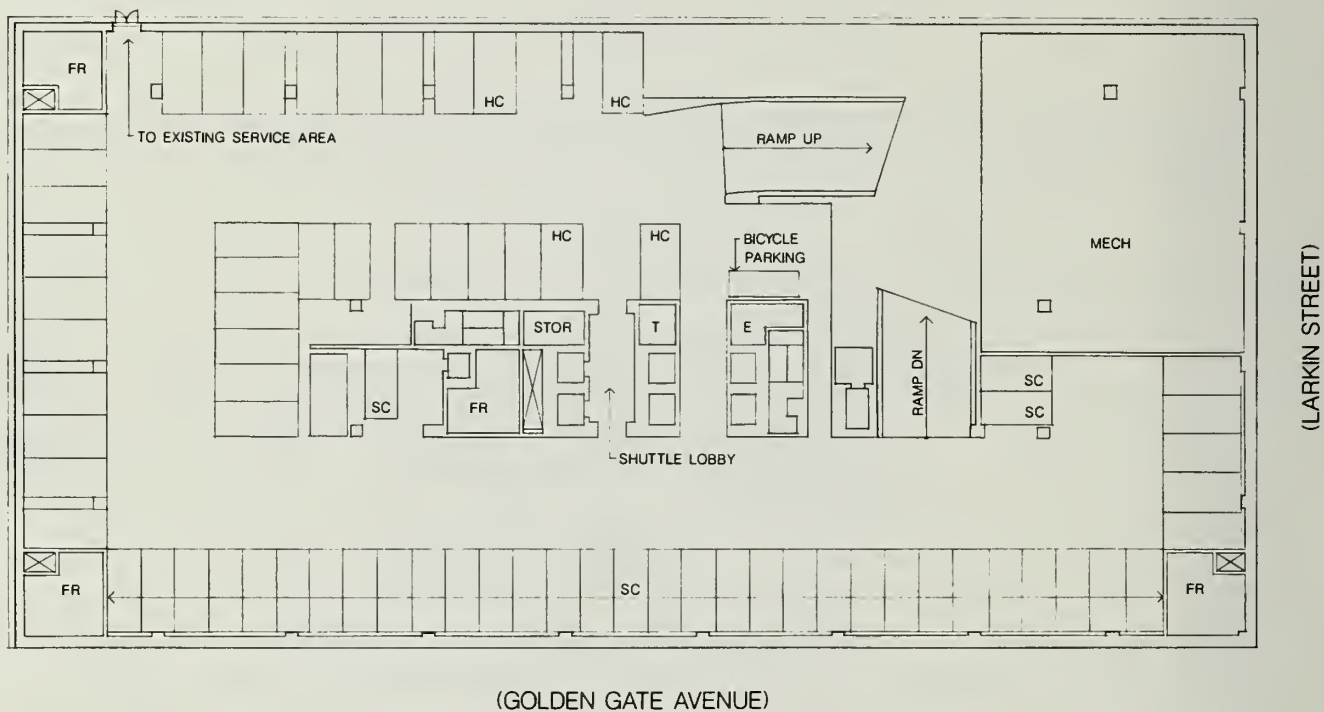


Figure 7. Typical Floor Plan.



FIRST BASEMENT PARKING LEVEL

(SECOND BASEMENT SIMILAR)



Figure 8. First Basement Parking Level.

III. ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES

A. LAND USE AND ZONING

Setting

The proposed project site is located north of Market Street on the south side of Golden Gate Avenue between Larkin and Hyde Streets. The property is owned by the University of California, Hastings College of the Law. The site includes 6 lots, numbers 10, 11, 12, 13, 14 and 15 on Assessor's Block 347. The total site encompasses 37,812.5 square feet with a 275 foot frontage on Golden Gate Avenue and a 137.5 foot frontage on Larkin Street.

The project site contains four existing structures, all of which have been rebuilt since the 1906 earthquake and fire. /1/ The oldest structure on the site, the Jacobs Building (formerly the Eureka Hotel) is situated on Lot 12 with a street address of 361-365 Golden Gate Avenue. The structure was built in 1906 and originally served as a brick rooming house. Sometime after 1912 the ground floor was given to commercial space. A restaurant and delicatessen currently occupy the ground floor. The upper floors are vacant. A small, single-story structure, built in 1948, is presently situated on Lot 13. A second transient rooming house, the former Philadelphia Hotel, was built on Lot 14 in 1907. Its street address is 343-349 Golden Gate Avenue. The ground floor of this building was also given to commercial space and a clothing outlet now occupies this space. The upper floors are vacant. Lot 15 contains a two-story office structure currently used for educational purposes. Its street address is 333 Golden Gate Avenue.

The remaining two lots on the project site, Lots 10 and 11, are currently used as a surface and basement level parking lot. The post-earthquake building formerly occupying these lots was demolished sometime after 1958. The basement level of Lot 10 originally served as the basement of the Chevrolet automobile sales building which was constructed in 1920. In summary, the present land uses on the site are presented in Table 3.

Current land uses on the project site based on square footage numbers include the following: Knight's Restaurant -- 7,300 square feet; Merchandisers II -- 9,300 square feet; Educational users -- 10,400 square feet.

=====

TABLE 3.
EXISTING LAND USES ON SITE

<u>Lot No.</u>	<u>Street Address</u>	<u>No. of Stories</u>	<u>Existing Uses</u>
10, 11		2(1 below grade)	176 parking spaces
12	361-365 Golden Gate Ave.	3	commercial & vacant
13	355 Golden Gate Ave.	1	office
14	343-349 Golden Gate Ave.	3	retail and vacant
15	333 Golden Gate Ave.	2	educational building

=====

See this EIR, Sections on Community Controversy and Archaeological and Historical Resources for a further discussion of past land uses of the project site.

The project site is situated within a transition area between the core Civic Center area, the North of Market area and the Tenderloin District. Current land use within the Civic Center area is predominantly governmental and includes City, State and Federal office buildings. A State office building is located directly across Larkin Street and a Federal office building is situated diagonally across Golden Gate Avenue from the project site. The College Law Library is located adjacent to the eastern lot line of the site.

The predominant land uses in the North of Market and the Tenderloin District include retail, commercial and residential. As a result of the project site's location, it is surrounded by a variety of land uses.

Residential structures are located directly south of the project site on McAllister and Larkin Streets. Structures with commercial space on the ground floor and residential use of the upper floors are located directly north of the project site on Golden Gate Avenue.

The project site is zoned C-3-G, Downtown General Commercial. The C-3-G district is composed of a variety of land uses including office, institutional, retail and residential. The intensity of development is lower in this district than in the downtown core area. The site's height and bulk classification is 80-X, with a locally allowed building height of 80 feet and no bulk limitations. An additional 16 feet above the height limit is allowed for mechanical equipment. The basic floor area ratio limit is 6:1, allowing a floor area of 226,875 gross square feet (excluding floor areas for certain uses) on the 37,812.5 square foot site. /2/

The area surrounding the site supports a variety of zoning classifications. The core Civic Center area is zoned P, Public Use District. Land directly opposite Lots 10 and 11 on Golden Gate Avenue as well as the residential property bordering the site's southern perimeter were recently rezoned from C-3-G to North of Market Residential Special Use District (NOMRSUD). /3/ Local zoning remains C-3-G on land directly across Golden Gate Avenue from Lots 12 through 15 of the project site. One-and-one-half blocks west of the site the zoning is C-2, Community-Business.

According to the Downtown Plan EIR, cumulative office development within the C-3 District is expected to be about 70.5 million gross square feet by the year 1990, and about 78.9 million gross square feet by the year 2000. /4/ Alternatives analyzed for the Downtown Plan EIR project a range of 77.5 million to 86.5 million square feet of total office space in the C-3 District by 2000. /5/ Forecasts in the Downtown Plan EIR indicate a net increase of downtown office space of about 1.4 million square feet per year between 1984 and 1990 and a range of 0.7 to 1.6 million square feet per year between 1990 and 2000.

Impacts

The proposed project would contain a mixture of governmental, educational, restaurant, retail and parking space totaling about 233,840 gross square feet (gsf), with approximately 160,530 gsf of governmental and educational space including a conference/meeting room, approximately 5,000 gsf of restaurant space, and about 1,280 gsf of retail space. Two basement levels of the structure would contain approximately 67,030 gsf of parking, which would provide about 160 parking spaces. Seven percent of the gross floor area of the structure, or 15,900 square feet of parking is permitted to be excluded from FAR calculations. See

this EIR, Section II.C., Project Characteristics, for this information in tabular form. See this EIR, Section V, Relationship Between Existing Plans and Policies and the Proposed Project, for a discussion of the proposed project's relationship to State and local governmental plans.

The proposed project would require demolition of four currently existing on-site structures as well as the two-level parking facility located on the southeast corner of the intersection of Golden Gate Avenue and Larkin Street. All of the on-site businesses and the educational users are aware that the College has plans to construct the proposed project.

The proposed project will increase the density of development on the site. Accompanying this increase in density will be a corresponding increase in intensity of land use.

The building will be set back about 12.5 feet from the southern property line in order to provide an open space buffer between the project and the residential units located to the rear of the project site. A public, open space plaza with controlled hours will extend along the site's eastern perimeter. This plaza will connect with the sculpture garden adjacent to the College Library and will extend the full distance from Golden Gate Avenue to McAllister Street. The plaza area on the project site would comprise about 4,100 square feet. However, the entire plaza area including the garden already existing adjacent to the College Library and the plaza extension to McAllister Street would be about 13,000 square feet. Landscaping and seating arrangements will be included within the plaza.

The land use of the proposed project will be compatible with the site's C-3-G zoning classification. Other than the increase in intensity of land use of the site, the project will have little effect on adjacent land uses with the exception of an increased demand for commercial services, such as retail and restaurant facilities.

Mitigation Measures

An open-space plaza area will be built in conjunction with the proposed project. An additional open space area will serve as a buffer separating the residential use on the site's southern perimeter from the increase in land use caused by the project.

Notes

- /1/ Roper, Praetzellis & Fredrickson, Results of Archival Research for the Proposed California State Building, March 21, 1985, pp. 6-7.
- /2/ City and County of San Francisco, Downtown Plan, section 124, October 17, 1985.
- /3/ City and County of San Francisco, ordinance No. 165-85, North of Market Residential Special Use District, March 28, 1985.
- /4/ City and County of San Francisco, Department of City Planning, Downtown Plan EIR, EE81.3, certified October 18, 1984, pp. IV. B. 28 and IV.B.31.
- /5/ Downtown Plan EIR, Appendices, pp. G-37-G-41.

III. ENVIRONMENTAL SETTING, IMPACT & MITIGATION MEASURES

B. URBAN DESIGN & VISUAL QUALITY

Setting

The 37,812.5 square foot project site consists of four structures and a parking lot. The on-site structures range from one to three stories in height and are typical of the older, commercial brick development constructed following the 1906 San Francisco earthquake. There is little architectural continuity among the buildings.

The project site is situated within a transition area between the core Civic Center area, the North of Market area and the Tenderloin District. The area contains buildings of various uses, heights and architectural styles. The Civic Center is characterized by monumental structures representative of both neo-classical architectural and modern styles, which serve both governmental and cultural activities. The Civic Center is listed on the National Register of Historic Places and is a recognized architectural resource.

A six-story State Office Building, consisting of a front structure located within the Civic Center area and a rear building located outside of the core Civic Center area, is situated across Larkin Street, directly west of the project site. This State Office Building has a facade of neo-classical granite on the front building within the Civic Center while the rear portion of the structure is covered with a tile fascia. A new State Office Building is currently being constructed on Van Ness Avenue between McAllister and Golden Gate, two blocks west of the project site.

A twenty-story Federal Building is situated diagonally across Golden Gate Avenue from the project site. This building is a curtain wall structure with Sierra white granite aggregate panel columns.

Residential structures are located directly south of the site on McAllister and Larkin Streets. Structures with commercial space on the ground level and residential use on the upper floors are located directly north of the project site on Golden Gate Avenue. The North of Market area typically contains buildings ranging in height from four to twenty stories, primarily constructed before 1945.

These structures are characterized by mixed architectural styles while the predominant land uses are retail commercial on the ground level with office or residential use on the upper floors.

The six story Hastings Law Library is situated adjacent to the project site's eastern perimeter.

The project site is generally visible from buildings and sidewalks about one and one-half blocks along Larkin Street to the north and south and along Golden Gate Avenue to the east and west.

Impact

The proposed project will replace the four currently existing on-site structures ranging in height from one to three stories with a six-story structure similar in scale to the Hastings Law Library to the east and the rear portion of the State Building to the west of the site. At a height of 80-feet, the project will blend with nearby structures with the exception of the Federal Building.

The project design would be a three-part composition: a base (ground floor, service level and second floor); a middle shaft (office floors three through five); and a top (office floor six with a terrace/planter setback for a portion of the two long sides).

The base (i.e. the ground floor and second floor) would be similar in scale to the base of the Hastings Law Library to the east. The main pedestrian entrance on Golden Gate Avenue will be two floors in height. Widening the entrance setback on the Golden Gate Avenue elevation on both sides to the next succeeding column may provide a better scale for the entry in relation to the building without adversely affecting any environmental consideration. A second pedestrian entrance would be provided from the adjacent plaza area. Canopies or awnings would be located above the ground floor clear glass windows which will add to the pedestrian scale. The architectural precast would be articulated at the base with bevels and reveals.

The proposed structure's facade material will be an architectural precast similar in color and finish to the College Law Library. The windows will be tinted, non-reflective glass on floors two through six, and clear glass will be used at the ground level. The middle shaft of the project will also be articulated with bevels and reveals, giving the facade both depth and verticality. The planter/terraces located on the sixth floor would be detailed

to rest between the building columns and would provide landscaping at the edge of the terraces. Window frames will be red in color and will create a unity of design between the proposed project and the College Law Library.

The building will be set back about 12.5 feet from the southern lot line in order to provide an open space buffer separating the project from the residential units located on the site's southern perimeter. The buffer area will be landscaped with trees and shrubbery.

An open space plaza with controlled hours will extend along the site's eastern perimeter. The plaza will connect with the sculpture garden adjacent to the College Law Library and will extend the entire distance from Golden Gate Avenue to McAllister Street. The plaza area on the project site would comprise about 4,100 square feet. However, the entire plaza area including the garden currently existing adjacent to the College Law Library and the plaza extension to McAllister Street would comprise about 13,000 square feet. Landscaping and seating arrangements will be included within this plaza.

Because of the similar height of nearby structures when compared with the height of the proposed building, the project will be visible in the short and mid-range views. In the short range, views of the project would blend with the nearby State Building and College Law Library; however, the view would contrast in scale with the structures on Golden Gate Avenue directly opposite the project site and the residential structures located on the site's southern perimeter. The proposed project would not block vistas along either Golden Gate Avenue or Larkin Street. In the mid-range views, the proposed project will be visible from the Civic Center Plaza located to the south of the project site. The project will also be visible from upper floors of the San Francisco City Hall; however, due to the similar height of adjacent buildings only the top floors of the proposed project will be visible.

The project would interrupt views to the south from windows on the upper floors of the building opposite to the project site at the northeast corner of Golden Gate and Larkin. These views presently occur due to the presence of the surface parking lot on the western portion of the project site. The project would also change views from rear windows of the residential units located to the south of the site.

The project will be a new source of night lighting. Although this lighting would not have an effect on nearby similar land uses, the lighting has the potential to affect nearby residential land uses.

Mitigation Measures

To lessen glare on nearby residential land use, the project will use lighting designed to avoid glare and will not use reflective glass. The plaza will have non-glare lighting with minimal foot candles.

To create a sense of transition from the core Civic Center area to the North of Market area, the design of the project will incorporate materials complementary to that used in surrounding similar structures. The exterior cladding will be neutral in hue. The plaza will be attractively landscaped, seating arrangements will be provided and an appropriate paving material will be used for pedestrian areas.

III. ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES

C. WIND AND SHADOW

WIND

Setting

Pedestrian comfort levels on sidewalks and in other public areas within San Francisco are partially determined by wind conditions.

The U.S. Weather Bureau and the Bay Area Air Quality Management District data show that westerly (winds blowing from the west), southwesterly and northwesterly winds are the most frequent and strongest during all seasons within the City. /1/ /2/ On the whole, west winds blow about 51% of the time. The westerly winds are also the strongest, averaging about 7 miles per hour, 8 miles per hour about 19% of the time and exceeding 12 miles per hour 6% of the time.

Winds from the southwest are typically the second most frequent (about 14% of the time) and the second strongest. The southwesterly winds average 7 miles per hour, exceed 8 miles per hour about 5% of the time and exceed 12 miles per hour about 2% of the year. Although northwest winds generally occur only 6 to 8% of the time, they have the second highest average speed during some years. Northwest winds average 5 miles per hour and exceed 8 miles per hour less than ½% of the time.

The average wind speeds are highest during summer months and lowest during the winter months. The strongest peak winds occur during the winter. The highest average wind speeds occur during mid-afternoon and the lowest average wind speeds are in the early morning.

Wind measurements were conducted at and near the project site using a scale model of the project site and the vicinity. The wind tunnel tests were performed by Donald Ballanti, a certified consulting meteorologist. Two locations exceed the 11 miles per hour pedestrian comfort criterion. These locations include the southeast and northeast corners of the intersection at Larkin Street and Golden Gate Avenue.

Impacts

Wind tunnel tests were performed for 15 locations in, and adjacent to, the project site. These tests were conducted using the methodology, analysis techniques and criteria specified by the San Francisco Downtown Plan and the San Francisco Department of City Planning. The wind tunnel tests were conducted for winds from the northwest, west-northwest, west and west-southwest wind directions. Data from the wind tunnel, together with the frequency distribution of winds from all directions, is used by a computer program to estimate the wind speed that would be exceeded 10% of the time annually between the hours of 7:00 a.m. and 6:00 p.m.

Pedestrian comfort varies under different conditions of sun exposure, temperature, type of clothing and various wind speeds. Winds up to 4 miles per hour have no noticeable affect on pedestrian comfort. Winds ranging from 4 to 8 miles per hour are felt on the face. Winds from 8 to 13 miles per hour will disturb hair, flap clothing and extend a flag mounted on a pole. Winds ranging from 13 to 19 miles per hour raise dust and disarrange hair. Winds from 19 to 26 miles per hour will be felt on the body. The limit of agreeable wind is defined as 26 miles per hour. In winds ranging from 26 to 34 miles per hour umbrellas are used with difficulty, walking steadily is difficult and wind noise is unpleasant. Winds over 34 miles per hour increase difficulty with balance and gusts can blow people over. /3/

The wind ordinance associated with the Downtown Plan (Section 148) is defined in terms of "equivalent wind speed." /4/ This term denotes wind speed averaged over one hour (mean velocity), adjusted to include the level of gustiness and turbulence. The Downtown Plan sets comfort levels of 11 miles per hour equivalent wind speed for areas of substantial pedestrian use and 7 miles per hour for public seating areas. New buildings and additions to buildings may not cause ground level winds that would exceed these comfort levels more than 10% of the year between the hours of 7:00 a.m. and 6:00 p.m.

Wind tunnel measurements were made at 15 locations within and near the project site for each of the prevailing wind directions using a scale model of the site and adjacent vicinity both with and without the proposed project. Wind test data were combined with wind records to predict the wind speeds that would be exceeded 10% of the time at each test location.

Currently two locations in the vicinity of the project site are above the 11 miles per hour pedestrian comfort criteria. These locations include the southeast and northeast corners of the intersection of Larkin Street and Golden Gate Avenue. Upon project completion only one of these locations, the northeast corner of Larkin and Golden Gate, would remain above the 11.0 pedestrian criteria. This location would remain at the existing wind speed level of 11.2 miles per hour. The hazard criterion (winds of 26 miles per hour no more than one hour per year) is not currently exceeded and would not be exceeded with the proposed project. One location within the plaza area to be constructed adjacent to the project would slightly exceed the 7 miles per hour sitting area comfort criterion.

In summary, the project would result in a mixed pattern of wind increases and decreases in the project site vicinity. From the standpoint of pedestrians in the area, the project would have little affect on comfort levels. The pedestrian level wind environment with the proposed project would remain similar to existing conditions.

Mitigation Measures

The wind tunnel tests were conducted on a scale model that did not include trees, shrubbery or other landscaping. The plaza area would be designed to provide wind shelter through careful placement of trees, shrubbery and eating areas. With this provision, wind-sheltering elements would reduce winds to below the 7.0 miles per hour comfort criterion for seating areas.

Notes

- /1/ Both this paragraph and the two paragraphs immediately following are based on information in the City and County of San Francisco, Draft EIR 100 First Street Building, 83,331 E, pp. 46-47.
- /2/ The U.S. Weather Bureau data were collected from 1891 to 1930 at 465 California Street. The Bay Area Air Quality Management District data were collected in the mid-1970s at 939 Ellis Street, near Van Ness Avenue.
- /3/ This paragraph is based on information contained in the City and County of San Francisco, Draft EIR 100 First Street Building, 83.331 E, p. 91.
- /4/ City and County of San Francisco, Downtown Plan, effective October 17, 1985, Section 148

SHADOW

Setting

Existing structures on the project site cast shadows on streets and sidewalks in the project vicinity. Portions of Golden Gate Avenue and Larkin Street within one block of the project site are shaded in different locations throughout various times of the day and year. Project shadow patterns are discussed in detail in the Impact section below. Section 146 of the Downtown Plan states that new buildings shall be shaped, if it can be done without creating an unattractive design and without unduly restricting the development potential of the site, so as to reduce substantial shadow impacts on public sidewalks within the C-3 District. Section 147 of the Downtown Plan states that any new development should be shaped, consistent with the dictates of good design and without unduly restricting the development potential of the site, to reduce substantial shadow impacts on public plazas and publicly accessible spaces. Factors to be taken into account in the determination of shadow impacts include: the amount of open area shadowed; the duration of the shadow; and the importance of sunlight to the utility of the type of open space being shadowed.

Impacts

In order to determine shadow effects, a complete shadow analysis for the proposed project was prepared by the Environmental Impact Planning Corporation for the hours of 10:00 a.m., 12:00 noon and 3:00 p.m. during the months of March, June, September and December. This analysis considers shadows cast by currently existing structures in the site's vicinity as well as shadows cast by the proposed project. Open space near the site's vicinity includes the Civic Center Plaza, the United Nations Plaza and the Federal Building Plaza.

Spring Months

At 10:00 a.m. the proposed project will cast newly created shadow on sidewalk areas directly adjacent to the northwestern corner of the project on Golden Gate Avenue and Larkin Street. Shade will also be cast on portions of the sidewalk area across Golden Gate Avenue from the project site. By 12:00 noon all shade cast by the project on Larkin Street would have been eliminated. Shade will remain on sidewalk areas directly fronting the project on Golden Gate Avenue. By 3:00 p.m. all shade on the northern portion of Golden Gate Avenue in front of the project site would be eliminated; however, shade will be cast on the sidewalk area directly fronting the project.

Summer Months

At 10:00 a.m. shade will be cast on sidewalk areas on Larkin Street to the west of the project site. The sidewalk directly bordering the project on Golden Gate Avenue will also be cast in shade; however, approximately one-half of this shade currently exists due to the on-site structures. At 12:00 noon newly created shade will be cast on the sidewalk area directly adjacent to the northwestern corner of the proposed project. At 3:00 p.m. the project will not shade sidewalks located on Larkin Street; however, the sidewalk area directly fronting the project site on Golden Gate Avenue will be cast in shade.

Fall Months

At 10:00 a.m. the project will cast newly created shadow on sidewalk areas directly adjacent to the northwestern corner of the project on Golden Gate Avenue and Larkin Street. Shade will also be cast on about 20% of the sidewalk area across Larkin Street from the project site and on sidewalk areas across Golden Gate Avenue from the project site. At 12:00 noon all shade cast by the project on the western portion of Larkin Street would be eliminated. At 3:00 p.m. all shade cast by the project on Golden Gate Avenue opposite the project site would be eliminated.

Winter Months

At 10:00 a.m. shade will be cast on the sidewalk areas bordering the project site on Golden Gate Avenue and Larkin Street; however, about 50% of the shade on the Golden Gate Avenue sidewalks currently exists due to the on-site structures. Shade will also be cast on the Larkin Street sidewalk bordering the Federal Building and on the Golden Gate Avenue sidewalk across the street from the project site. About 2% of the Federal Building's plaza will also be in shade caused by the project at 10:00 a.m. during the winter months. By 12:00 noon all shade cast by the proposed project on Larkin Street and the Federal Building plaza and sidewalk areas will have been eliminated. Shade will be cast, however, on the western one-half portion of sidewalk areas fronting the project site on Golden Gate Avenue. Shade will also be cast on portions of the structures located across Golden Gate Avenue from the project site. At 3:00 p.m. the area surrounding the project site is dominated by existing shade and only a miniscule portion of this shade would be created because of the proposed project.

Open Space

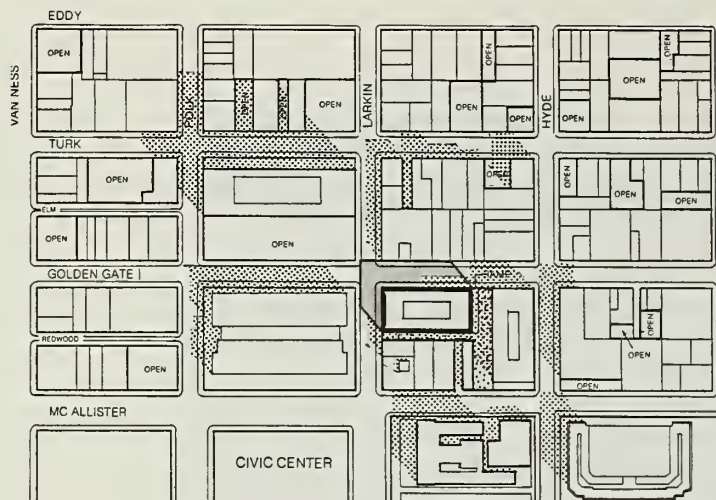
The project would not shadow any properties under the jurisdiction of the Recreation and Park Commission (those covered by Proposition K). The project would not cast shade on the Civic Center Plaza or the United Nations Plaza areas.

At no time would the project cast shade on any of the residential structures located on the project site's southern perimeter.

The open space plaza which is planned in conjunction with the project will border the project's eastern perimeter and will extend the full distance from Golden Gate Avenue to McAllister Street. At no time of the year would the project cast newly created shade on this area.

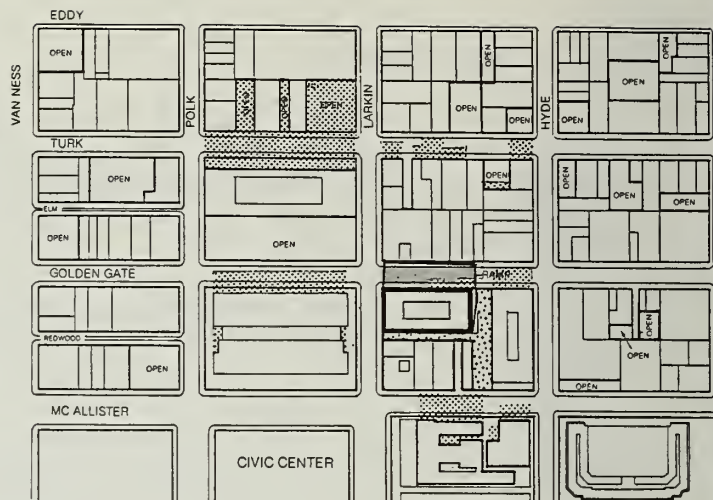
Mitigation Measures

Because no significant impacts would be caused by the proposed project, no mitigation measures are required.



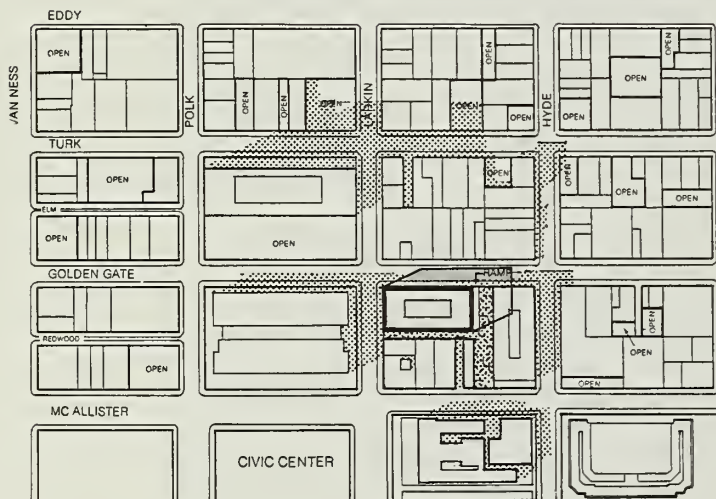
DATE
MARCH 21

TIME
10:00 AM PST



DATE
MARCH 21

TIME
12:00 NOON PST



DATE
MARCH 21

TIME
3:00 PM PST

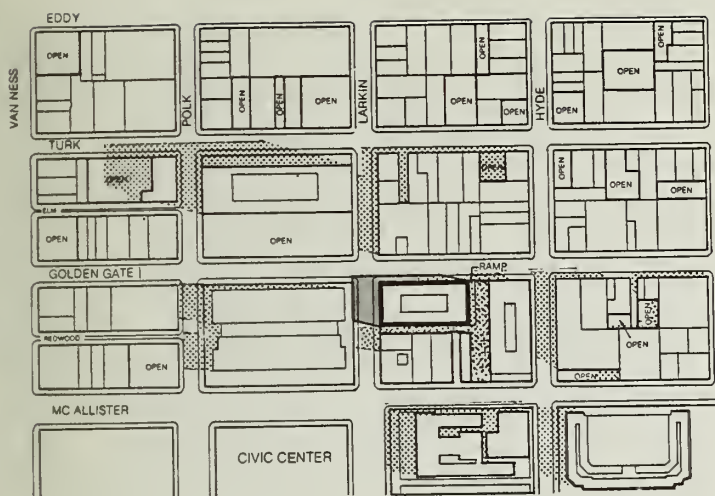
LEGEND

- NEW SHADOW
- EXISTING SHADOW
- OPEN SPACE



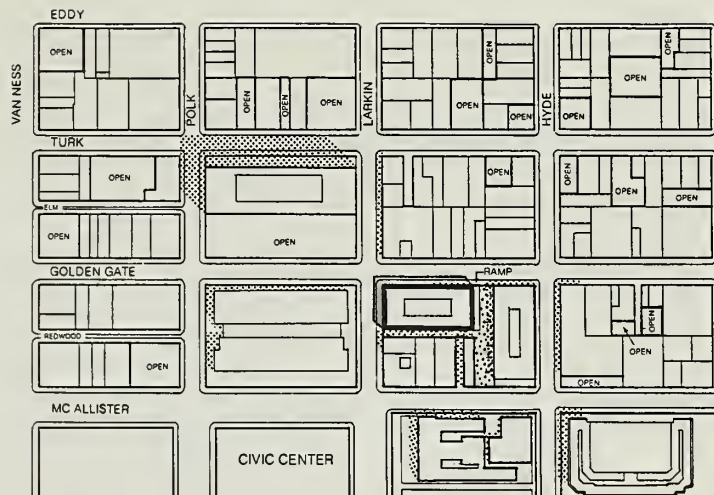
PROJECT SHADOW PATTERN GOLDEN GATE BUILDING

Figure 9. Project Shadow Pattern, March.



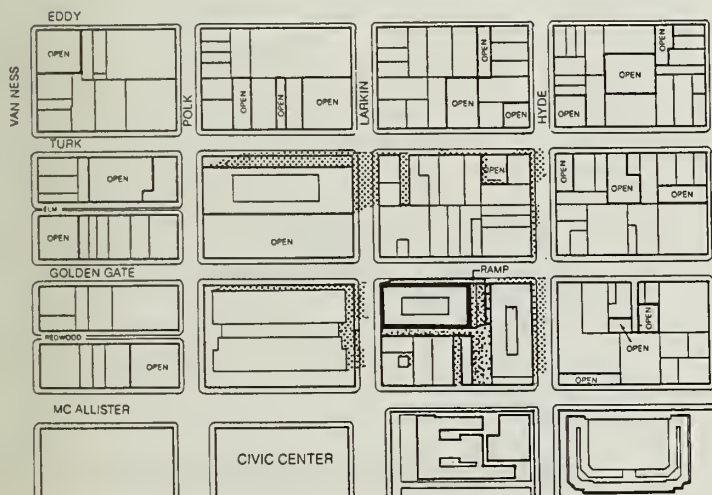
DATE
JUNE 21

TIME
10:00 AM DST



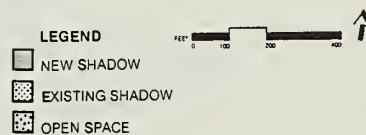
DATE
JUNE 21

TIME
12:00 NOON DST



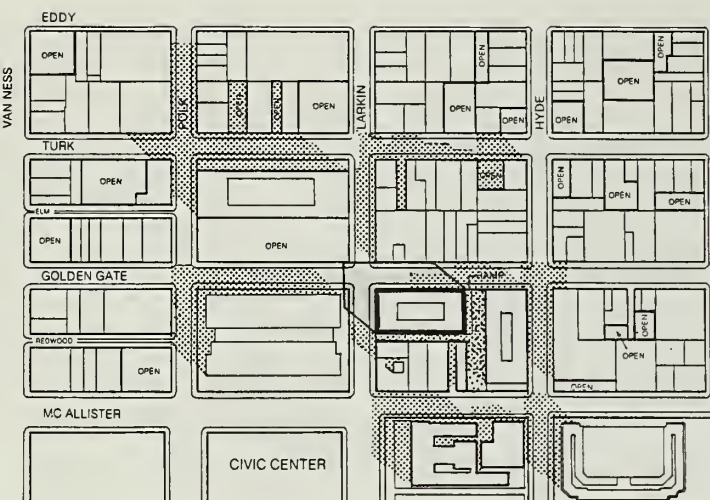
DATE
JUNE 21

TIME
3:00 PM DST

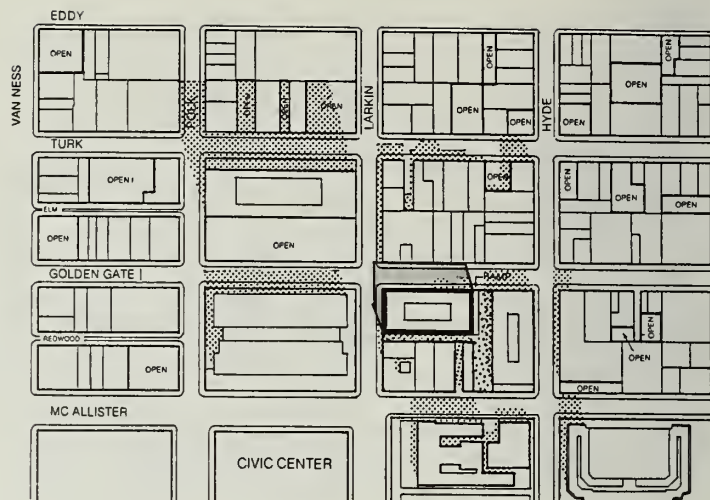


PROJECT SHADOW PATTERN GOLDEN GATE BUILDING

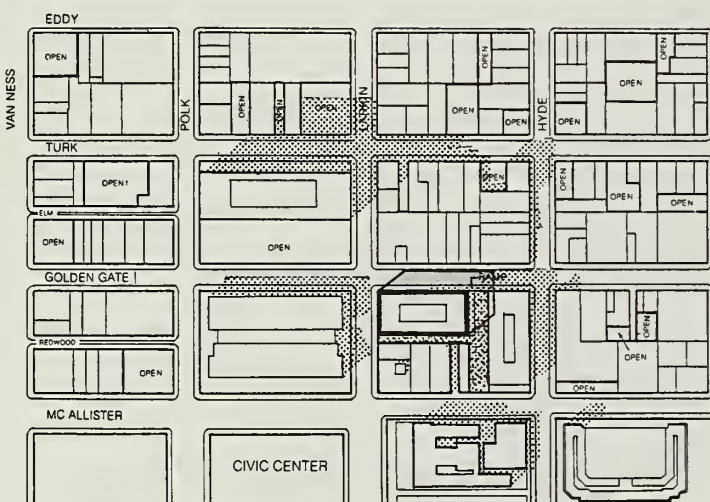
Figure 10. Project Shadow Pattern, June.



DATE TIME
SEPTEMBER 21 10:00 AM DST



DATE TIME
SEPTEMBER 21 12:00 NOON DST



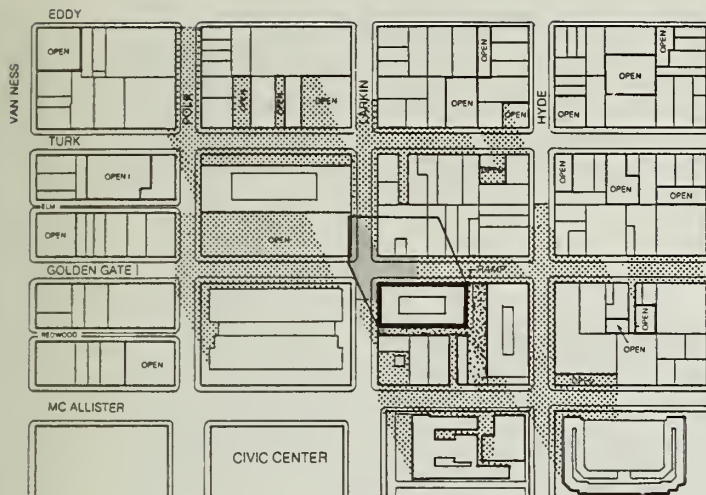
DATE TIME
SEPTEMBER 21 3:00 PM DST

LEGEND
 ■ NEW SHADOW
 ■ EXISTING SHADOW
 ■ OPEN SPACE

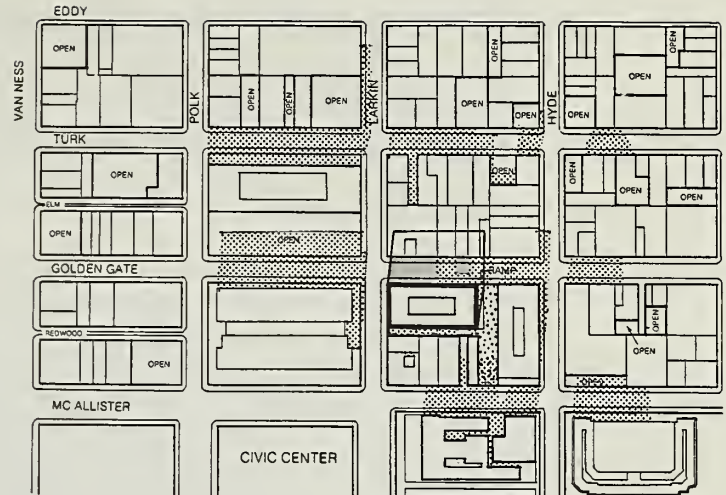


PROJECT SHADOW PATTERN GOLDEN GATE BUILDING

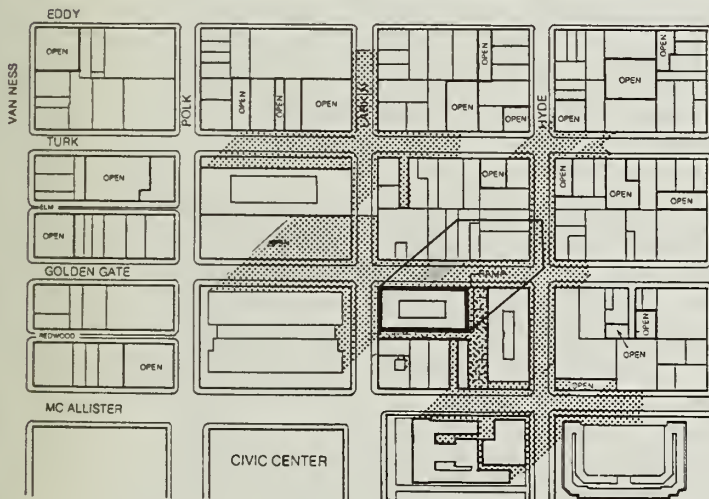
Figure 11. Project Shadow Pattern, September.



DATE TIME
DECEMBER 21 10:00 AM PST

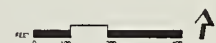


DATE TIME
DECEMBER 21 12:00 NOON PST



DATE TIME
DECEMBER 21 3:00 PM PST

LEGEND
 □ NEW SHADOW
 ■ EXISTING SHADOW
 □ OPEN SPACE



PROJECT SHADOW PATTERN GOLDEN GATE BUILDING

Figure 12. Project Shadow Pattern, December.

III. ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES

D. ARCHAEOLOGICAL AND HISTORICAL RESOURCES

ARCHAEOLOGY /1/

Setting

Evidence of prehistoric activity as early as 3200 B.C. exists in the vicinity of the site. During the excavation of the Bay Area Rapid Transit Civic Center Station, located 1,000 feet south of the project site, isolated remains of an aboriginal were found 75 feet below grade. Radiocarbon dating placed the remains at 2950 B.C. + 250 years. /2/

The earliest recorded history in the vicinity of this site dates from the Mexican period. The site is within one and one-half miles of Mission Dolores, the focal point of the Spanish-Mexican occupation of California. It is possible that a structure depicted in an 1853 map of the City as being situated in the immediate vicinity of the project area may date to this period. The archaeological analysis prepared for the site states there is a possibility that deposits dating to the late Mexican occupation of the San Francisco area may be present.

With the discovery of gold in California and the accompanying migration, rapid expansion of the city of San Francisco occurred. By 1849 a cemetery had been established one block southeast at the site of the present day Main Library. By 1868 single and multiple residential buildings had been constructed on the site and businesses had been established on the site's western end by 1886. All structures located on the site along with those in the surrounding area were destroyed by fire the evening following the 1906 earthquake. In the rebuilding that ensued, the area was developed with commercial structures interspersed with apartment buildings and residential hotels. See this EIR, Land Use section, for a description of the recent land uses of the project site.

The site condition at the time of the earliest human settlement consisted of shifting dune sands supported by dense clay-like sand or stiff sandy clay with bedrock at about 150-200 feet below ground surface. Since that time, with the process of urbanization and the accompanying grading of streets, some filling and cutting has occurred. Local

19th century documents indicate that development grades were established at between 70 to 72 feet at Van Ness and Golden Gate Avenue, two blocks west of the project site. This grade has remained unchanged, and given the general terrain of the surrounding area, it is doubtful there have been any significant efforts to maintain street elevation at the site by cutting or grading.

Artifacts of consequence typically found at similar San Francisco sites include deposits associated with the residential and commercial uses occupying the site prior to the 1906 earthquake and fire. Skeletal remains have been found in the area, most notably the fragmentary human bones discovered during the excavation of the BART Civic Center Station approximately 1000 feet south of the project area, and Gold Rush period remains (believed to be from the Yerba Buena Cemetery) found during repair work on the Main Library foundation, one block south of the project site.

Impacts

An archaeological resources report titled "Results of Archival Research for the Proposed Golden Gate Building" was prepared for the project site by Roper, Praetzellis & Fredrickson and is on file with the University of California, Hastings College of the Law, 200 McAllister Street, San Francisco. While no on-site investigation has been conducted, archival evidence suggests the possibility that archaeological deposits or cultural resources dating to the early American occupation and preceding Spanish-American and prehistoric periods may be present within the project area. It is estimated that new excavation to a level of approximately 14 feet below that of existing basements would be required. In any event, soils not previously exposed would be disturbed.

The archaeological report recommends that additional archival research be performed to provide information necessary to accurately position test trenches and to develop methods to investigate the undisturbed portion of the project area.

Mitigation Measures

As part of the proposed project, an archaeologist will conduct additional archival research and will meet with the soils engineers prior to taking soil samples in order to communicate to the engineers information which may be of use in assessing the integrity of potential archae-

ological deposits. Based upon the results of the soil sample, the archaeologist will instruct all excavation and foundation crews on the proposed site of the potential for discovery of cultural or historic artifacts and of the requirement that work be halted immediately and the archaeologist be called to the site if such artifacts are uncovered. The archaeologist would assess the significance of the find and immediately report to the California Department of General Services (DGS). The DGS, in consultation with the State Office of Historic Preservation and representatives of the Native American Community (if appropriate), would recommend specific mitigation measures. Excavation or construction that might damage discovered cultural resources would cease for a maximum of four weeks to permit inspection, recommendation and retrieval, if appropriate.

HISTORICAL RESOURCES

Setting

The project site contains four one to three story structures built between 1906 and 1948, as listed below.

<u>Building</u>	<u>Construction Date</u>	<u>Heritage Rating</u>
Lot 15 (333 Golden Gate)	1912	D
Lot 14 (343-349 Golden Gate)	1907	D
Lot 13 (355 Golden Gate)	1948	D
Lot 12 (361-365 Golden Gate)	1906	C

All structures on the project site with the exception of the Lot 12 building (which is rated 'C') are rated 'D' by the Foundation for San Francisco's Architectural Heritage. /3/ This foundation conducted surveys which assigned ratings to buildings in the C-3 district. The survey rated structures from a high of 'A' (highest importance) to 'D' (minor or no importance). Buildings rated 'C' are recognized to be of contextual importance and are distinguished by their scale, materials, compositional treatment, cornice, or other features. /4/ They establish the setting for more important structures and add visual richness and character to the area. The criteria used in the evaluation were based on guidelines of the National Trust for Historic Preservation, the National Register of Historic Places and the State Historic Resources Inventory.

None of the buildings located at the project site are included in the 1976 San Francisco Department of City Planning Architectural Survey which awarded ratings based

on architectural merit. The project site is not within any of the six conservation districts listed in the Downtown Plan./5/ Furthermore, in 1984 the State Office of Historic Preservation declined to nominate these buildings to the Department of Interior for inclusion on the National Register of Historic Preservation. /6/

Within the vicinity of the proposed project there are several buildings rated 'A' and 'B' by the Foundation for San Francisco's Architectural Heritage and also rated by the City's Department of City Planning. The Civic Center complex, which includes the City Hall and other governmental buildings is on the National Register of Historic Places and is a recognized architectural resource. In addition to the Civic Center complex, six buildings are on the City's List of Architecturally and/or Historically Significant Buildings in the Downtown. These include Rulf's Film Exchange at 125 Hyde Street, the Film Exchange at 245-249 Hyde Street, Kipling Apartments at 381 Turk Street, the YMCA Hotel at 351 Turk Street, the Hibernia Bank Building at 1 Jones Street and the St. Boniface Church at 155 Golden Gate Avenue.

Impacts

The proposed project requires the demolition of four structures, none of which are included on the City of San Francisco's List of Architecturally and/or Historically Significant Buildings, nor rated in the 1976 San Francisco Department of City Planning citywide inventory of architecturally significant buildings. Three of the structures are rated 'D', and one is rated 'C' by the Foundation for San Francisco's Architectural Heritage. None of the buildings are listed as significantly contributory in the Downtown Plan, nor are they located within a conservation district within the Downtown Plan.

Within the context of project relationships to nearby buildings, the project site is adjacent to the core Civic Center area which is included on the National Register of Historic Places. Six buildings within the project's vicinity are listed on the City of San Francisco's List of Architecturally and/or Historically Significant Buildings.

While continued loss of 'C' rated buildings may affect the architectural context of the City, the loss of the Lot 12 structure cannot be construed as having a significant impact on historical and architectural resources.

Mitigation Measures

No mitigation measures are required because the project will not cause a significant effect on historical resources.

Notes

- /1/ Most information in this section is taken from a report prepared by Roper, Praetzellis, and Fredrickson for the California Department of General Services, Results of archival Research for the Proposed California State Building, March 21, 1985, pp. 1-11.
- /2/ State of California, Department of General Services, Office of Facilities Planning and Development, San Francisco State Building Final Environmental Impact Report, Sacramento, 1980, p. 29.
- /3/ Telephone conversation with Grant Dehort, Foundation for San Francisco's Architectural Heritage, December 3, 1984.
- /4/ Foundation for San Francisco's Architectural Heritage, Splendid Survivors, California Living Books, 1979, pp. 12-13.
- /5/ San Francisco Department of City Planning, Downtown Plan Proposal for Adoption, October 1984, pp. 74-77.
- /6/ Eric Sandweiss, Foundation for San Francisco's Architectural Heritage, telephone conversation, December 6, 1984.

III. ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES

E. TRANSPORTATION, CIRCULATION AND PARKING

Setting

Roadway Network

The project site is on Golden Gate Avenue between Larkin and Hyde Streets. All three streets are designated by the 1983 Downtown Transportation Plan as primary vehicular streets. /1/ /2/ Golden Gate Avenue is a one way arterial street with three eastbound lanes. Larkin Street has three northbound lanes (each about ten feet wide) with parking permitted on both sides. Hyde Street is a one-way arterial street with three southbound lanes. Each lane is about eleven feet wide and parking is allowed on both sides of the street.

U.S. Highway 101 (Van Ness Avenue) is two blocks west of the site and provides access to the Golden Gate Bridge. The closest freeway access to the East Bay and Peninsula is four blocks west of the site at the Turk/Gough Street intersection on-ramp to southbound U.S. 101. U.S. 101 southbound provides access to I-80 (Eastbay) and I-280 (Peninsula); U.S. 101 off-ramps are provided at the Golden Gate/Franklin Street intersection. Alternate freeway on-ramps may include Oak/Laguna, South Van Ness/Erie, Tenth/Bryant, Eighth/Bryant, or Sixth/Brannan. Alternate freeway offramps include Fell/Laguna, Mission/Otis, Ninth/Bryant, Eighth/Harrison, and Seventh/Bryant, or Sixth/Brannan.

Traffic

Traffic volume analysis at the intersections of Larkin/McAllister, Larkin/Golden Gate and Golden Gate/Hyde indicates that during the peak hours of 4-6 p.m. these intersections operate at Level of Service C (stable flow, acceptable delay), A (stable flow, no delay) and A, respectively.

Traffic control surrounding the project site consists of fixed traffic signals operating on 60-second cycles. The traffic signals at Golden Gate/Larkin, Golden Gate/Hyde and Larkin/McAllister are two-phase to facilitate heavy traffic movement.

Parking

The project site is within the Parking Belt Area identified in the City's Master Plan. /3/ The area is appropriate for short term parking facilities to replace the spaces removed from the core area. These facilities are located and designed to intercept vehicles entering downtown from major thoroughfares before they reach the downtown core automobile control area.

Current on site parking consists of 4 employee parking spaces on Lot 12 and 176 spaces in the parking lot located on Lots 10 and 11. Although this parking lot is available to all users on a space available basis, it primarily services employees and students of the College. By 9:00 a.m. the parking lot is approximately 95% occupied and remains that way until 5:00 p.m. /4/

Curb parking on the blocks adjacent to the project site includes twenty 1-hour and two 30-minute metered spaces on Golden Gate Avenue and fifteen 1-hour spaces on Larkin Street. The curb on Golden Gate Avenue has two designated loading zones extending for lengths of 35 and 40 feet. The curb on Larkin has no loading zone. Additional 1-hour metered spaces are available on other streets surrounding the project site. Mid-afternoon occupancy of these spaces was approximately 83%.

Off street parking is currently available at several locations near the project site, including, the Civic Center Garage (McAllister between Polk and Larkin -- 850 spaces), Fox Plaza Garage (Hayes between Polk and Larkin -- 60 spaces), Opera Plaza (Van Ness and Golden Gate -75 spaces), the Performing Arts Center (Franklin and Hayes -- 600 spaces), and City Park (Grove between Larkin and Hyde -- approximately 144 spaces).

The San Francisco Downtown Plan EIR estimated there was a demand of 45,300 parking spaces in the C-3 (Downtown Commercial) district. The figure represents 94% of the 48,000 spaces located in and near the C-3 district. The short term parking demand, while representing 25% of the equivalent daily demand, is about 65% of the daily vehicle travel. This equivalent daily demand leaves a balance of 10% of the parking supply vacant. However, variations in short term demand may cause temporary localized overloads of parking facilities within certain areas of the downtown area while parking may be available at other locations within the city. /5/

Transit

Transit preferential streets, according to the Downtown Transportation Plan, include Van Ness, Golden Gate, McAllister and Market (p. 17). The Center City Circulation Program has proposed that a contraflow transit lane be installed on Hayes Street by eliminating one westbound lane to allow eastbound bus traffic. /6/

The project site is served by local and regional transit. Local transit service is provided primarily by the San Francisco Municipal Railway (Muni). Twenty one Muni lines stop within three blocks ($\frac{1}{4}$ mile) of the site; five are Metro lines and the balance are motor and trolley lines. The 19 Polk, 5 Fulton, 16X Noriega Express and 72X Sunset Express stop within one block of the site. Muni provides access to the regional transit systems such as Alameda-Contra Costa Transit (AC), Caltrans/Southern Pacific (SP), and San Mateo County Transit (SamTrans).

Regional transit service within the project area is provided by Bay Area Rapid Transit (BART) and Golden Gate Transit (GGT). The Civic Center BART and Metro (Muni subway) station is located about two blocks from the project site.

The transit agencies serving downtown San Francisco carry approximately 60% of the peak-period employee work travel, as well as about 20% of other peak-period travel. PM peak-hour and peak-period loadings on the local and regional transit routes were found to be near capacity for some of the routes in 1984 (see Table 4). The values shown in Table 4 are sums for the peak hour and two-hour peak periods. Individual transit vehicle loadings vary on a day-to-day basis because of fluctuations in ridership (demand) and because of variations in operating conditions caused by traffic congestion, equipment availability, and/or system breakdowns.

The 1982-1983 transit ridership and loading data used in the Downtown Plan Draft EIR analysis are summations of actual counts of individual transit lines for that period in time. Calculations are made on the basis of observed operating conditions, as opposed to scheduled operations. Muni supplied the data for the Downtown Plan Draft EIR analysis from its ongoing program of ridership checks.

=====

1982-1983 MUNI RIDERSHIP CHARACTERISTICS
FOR ROUTES WITHIN STUDY AREA:
EVENING COMMUTE PERIOD

<u>Line</u>	<u>Peak Hour V/C</u>	<u>Percent V/C</u>	<u>Load Factor</u>	<u>Peak Two- Hours V/C</u>	<u>Percent V/C</u>	<u>Load Factor</u>
5(TC)	521/580	90	1.12	981/1180	83	1.04
6(TC)	521/520	100	1.25	786/820	96	1.20
7(TC)	400/420	95	1.19	695/820	85	1.06
8(TC)	504/600	84	1.05	899/1260	71	.89
9	330/381	87	1.21	748/874	86	1.20
16X	321/403	80	1.12	443/560	79	1.11
19	342/426	80	1.13	614/874	70	.98
21(TC)	316/380	83	1.04	580/740	78	.98
26	245/381	64	.90	438/784	56	.78
31	268/291	92	1.29	425/538	79	1.11
42	364/470	77	1.08	695/1008	69	.97
47(TC)	316/400	79	.99	613/840	73	.91
48	223/269	83	1.16	412/605	68	.95
49	not available					
66	114/157	73	1.02	not available		
71	414/358	116	1.62	618/650	95	1.33
72X	145/179	81	1.13	212/314	68	.95
J(S)	1000/1541	64	1.30	1581/2811	56	1.12
K(S)	1092/1360	80	1.61	2180/2907	75	1.30
L(S)	1008/1179	85	1.71	2634/3083	85	1.71
M(S)	1626/1813	89	1.79	2502/3360	75	1.72
N(S)	1833/2176	84	1.68	3053/4035	75	1.51

Table Notes

- (S): Metro Subway
 (TC): Trolley coach line
 V/C: Volume-to-capacity ratio assumes recommended capacity of vehicle.
 e.g. 125% of seats for trolley coaches
 140% of seats for motor coaches
 200% of seats for light-rail vehicles
 Percent V/C: The average capacity between ridership and recommended capacity expressed in percentages.
 Load Factor: The average ratio between ridership and seated capacity. e.g. for motor coaches and trolley coaches 1.0 = 48 passengers; 1.25 = 60 passengers; 1.4 = 67 passengers; 1.5 = 72 passengers. For light-rail vehicles, 1.0 = 68 passengers and 2.0 = 136 passengers.
 Peak Hour: Hour with highest observed load factor.
 Peak Two Hours: Two-hour period with highest observed load factor.

The Municipal Railroad has reevaluated service standards: the change established 1.25 or 125% of seated capacity as the optimal comfort load factor for trolley coaches and 1.4 or 140% of seated capacity for diesel coaches. The change affects system capacity estimates and V/C ratios, leaving load factors unchanged.

Source: San Francisco Department of City Planning, Guidelines for Environmental Review (Transportation Impacts), November 1984.

A survey of PM peak hour conditions for 1984 indicates that BART operates at Level of Service 'F', and Muni at Level of Service 'E.' /7/ These levels are the so-called crush conditions ('A' is considered the best Level of Service with the least crowding and delay). The other transit systems operated at Level of Service 'D' or better.

Pedestrian/Bikeway

Adjacent to the project site official sidewalk widths are 12 feet on Larkin Street and 10 feet on Golden Gate Avenue. Existing pedestrian activity on the site is generated from the parking lot, retail store and restaurant. Effective widths (allowing for trees, signs and parking meters) are about 9 feet on Larkin and 6 feet on Golden Gate. Pedestrian use of the sidewalks is heaviest during the nontime hours and is 'unimpeded' on sidewalks and crosswalks adjacent to the project site.

Table 5 shows Pedestrian Flow Regimes used in the San Francisco Downtown Plan Appendix. These flows range from the "open" category where movement is unobstructed, to the "jammed" category where only shuffling movement is possible. No unusual pedestrian safety or congestion problems were observed at the site.

=====

TABLE 5.

PEDESTRIAN FLOW REGIMES

<u>Flow Regime</u>	<u>Walking Speed Choice</u>	<u>Conflicts</u>	<u>Average Flow Rate (P/F/M) (a)</u>
Open	Free selection	None	0.0 - 0.5
Unimpeded	Some selection	Minor	0.5 - 2
Impeded	Some selection	Indirect interaction	2 - 6
Constrained	Some restriction	Multiple	9 - 10
Crowded	Restricted	High probability	10 - 14
-----Design Limit-----Upper Limit of Desirable Flow----			
Congested	All reduced	Frequent	14 - 18
Jammed	Shuffle only	Unavoidable	(b)

(a) P/F/M = pedestrians per foot of sidewalk per minute.

(b) For Jammed Flow, the (attempted) flow rate degrades to zero at complete breakdown.

Source: Pushkarev and Zupan, Urban Space for Pedestrians

=====

Four bicyclists were observed in the vicinity during the AM and PM traffic volume counts. The bike plan of the Transportation Element of the City's Master Plan has designated one bikeway pass through the project site study area. A Class III Bikeway (route signs only) runs south of the project site near City Hall on Polk Street and along Grove Street. There are no Class I Bikeways (off-road, separate path) or Class II bikeways (striped lanes). Polk, Market, Grove, and Larkin are designated as preferred commute bike routes.

Impacts

Demolition, Excavation and Construction Traffic

During the demolition, excavation and construction periods, transportation impacts would result from truck movements to and from the project site. Demolition would require about four weeks and would generate an average of 30 truck movements per day in and out of the project site. Excavation would require approximately eight weeks, and would generate no more than 35 truck trips daily, with no more than five trips occurring during peak hours. The volume of truck traffic would not decrease service levels on streets near the site. Deliveries of construction materials during other phases of construction would be limited to the hours between 9:00 a.m. and 4:00 p.m. in order to minimize impacts on peak period traffic.

Sidewalks fronting the project site on Golden Gate Avenue and Larkin Street would be closed during demolition, excavation and construction. The parking lanes on these streets would also be closed to provide a temporary pedestrian walkway. Closure of these parking lanes would temporarily displace metered parking spaces and a loading zone. There would, however, be no significant reduction in traffic capacity during peak periods because these lanes are used only for parking. Assuming a 5-foot temporary pedestrian walkway width, pedestrian service levels would increase to the "impeded" range during peak periods.

Approximately 200 construction workers would be employed on the site during the 18 month actual construction period. This could generate between 160-200 auto trips during the evening commute period. Because construction workers work earlier hours, only a portion of this travel would occur during the 4:30 to 5:30 p.m. city-wide peak hour. The project site's location within close proximity to Muni and BART could result in fewer construction workers arriving at the project site in automobiles and, therefore, parking demand generated by construction workers could also be reduced.

The construction truck traffic would cause a slight lessening of the capacities of access streets and haul routes because of the slower movements and larger turning radii of trucks. Lane blockage on Golden Gate Avenue and Larkin Street, if it were to occur, would reduce the capacity of these streets. Blockage during times of peak traffic flow would be more likely to create conflicts than during non-peak hours because of the increased numbers of vehicles that would have to maneuver around queued trucks.

Project Travel Demand

On the basis of land use, the project would generate about 4,766 person trip-ends (pte) per day. The trip generation calculations include travel to and from the project site by both visitors and employees of the project. Additionally, the trip generation includes all travel to and from the project site in autos, service vehicles and trucks, and on public transportation as well as other modes of transportation. /8/

Calculations indicate that based on the 4,766 person trip-ends generated daily, approximately 788 of these would occur during the p.m. peak two hour period, of which about 497 would occur during the p.m. peak hour. About 730 new outbound trips from the project are expected to occur during the p.m. peak-period, of which about 461 would occur during the p.m. peak hour. The geographical and modal distribution of the project travel is based upon projected modal splits for the year 2000 contained in the Downtown Plan EIR (EE 81.3). /9/ The future modal splits have been applied to the project travel for the purpose of comparing project travel with future travel demand on the transportation system serving San Francisco.

Trip generation rates of 33.1/1000 net square feet of office and educational space were used to estimate travel from the project. Because a State building generally houses one employee per every 150 net square feet of office space, this data was incorporated with the City of San Francisco's daily trip rate to yield a trip generation rate of 33.1 person trip-ends per 1,000 net square feet. However, the person trip-ends calculated for the proposed project represent a worst-case scenario because in calculating travel demand caused by other projects within the City of San Francisco, trip generation rates of 18.1 person trip-ends per 1,000 gross square feet of office space are used. The trip generation rate of 18.1/1000 gross square feet of office space is based upon one office employee per every 275 gross square feet as outlined in the Guidelines for Environmental Review, (Transportation Impacts), November 1984. Thus, trip generation rates for the proposed project are approximately one-third greater than would be calculated using City data.

=====

TABLE 6: PROJECT PERSON TRIP GENERATION /1/ /2/ /3/

<u>Land Use</u>	<u>Trip Rate</u>	<u>Daily Trips</u>	<u>Peak Period Trips (1-hr/2-hr)</u>	
			<u>Total</u>	<u>Outbound</u>
144,000 net sq. ft. educational and governmental space, including offices.	33.1/1000	4,766	497/788	461/730

Work Trips		1,908		
Non-Work Trips		<u>2,858</u>		
Total		4,766		

Table Notes

- /1/ State of California, Department of General Services, Office of Facilities Planning and Development, February 25, 1985. A State building generally houses one employee per 150 net square feet of development.
- /2/ Other than the meeting/conference room on the ground floor of the project, all educational space in the proposed project will be administrative in nature. Thus, the daily trip rate of 33.1/1000 is used for both educational and governmental space.
- /3/ The current on-site restaurant space comprises about 7,300 sq. ft. The restaurant space in the proposed project will be about 5,000 sq. ft. Because there will be a net decrease in the restaurant space with a corresponding projected net decrease in person trips generated by the restaurant, the daily trip rate does not include trips generated by the restaurant. Likewise, because the current on-site retail space comprises about 9,000 sq. ft. while the retail space in the proposed project will be about 1,280 sq. ft., the daily trip rate does not include trips generated by the retail space in the proposed project.

Traffic

Regional Analysis (1984 Cumulative Travel)

Regional analysis has been conducted for both the p.m. peak hour and two hour p.m. peak period. The p.m. conditions have been considered because they are usually the most severe on freeways and streets within San Francisco, whereas the a.m. peak conditions are the most severe at locations outside the City.

Regional screenline traffic demand in 1984 during the p.m. peak hour used between 90 - 100% of the available capacity on the freeways and bridges. (See Table 7.) Although the Bay Bridge's capacity is calculated to be 9,000 vehicles per hour (vph), the 1984 peak hour demand represents the effective capacity.

Peak hour and peak period freeway operating conditions in 1984 were generally in service levels 'D' to 'E,' which indicates unstable flow in the 35 - 45 mph range.

Appendix B shows the level of service definitions from freeway operations. All regional auto corridors operate at level of service 'E' (volume to capacity ratio of 0.90 to 1.00). The Bay Bridge operates closer to capacity (0.99) during the peak period, while I-280 and U.S. 101 operates at a level of service 'D.'

Regional Analysis (2000 Cumulative Travel)

Based on the San Francisco Downtown Plan EIR, demand during the peak hour in the East Bay and Peninsula corridors is expected to increase about 15% between the years 1984 and 2000. Peak hour demand in the North Bay corridor is expected to increase by about 6% between 1984 and 2000. (See Table 7.) The East Bay, Peninsula and North Bay corridors would have excess demand during the peak period. Excess demand would result in either a spreading of the demand into other hours around the peak period or in increased transit and ridesharing use should additional transit service or incentives be provided. Operating conditions at the regional screenlines would be at or over capacity with level of service 'F,' assuming that capacity along the auto corridor is not increased. Traffic flow conditions are expected to be very unstable and could experience temporary flow interruptions throughout the peak period.

TABLE 7.

OUTBOUND REGIONAL AUTO DEMAND

Regional Auto Corridor	Capacity	1984	Downtown Plan (2000)		Volume/ Capacity	Project ¹ Percent
		Demand	Volume/ Capacity	Demand		
Peak Hour						
Bay Bridge (I-80)	9,000	8,540	.95	9,790	1.09	.0011
Golden Gate Bridge (U.S. 101)	7,200	6,740	.94	7,150	.99	.0010
U.S. 101 (south of Harney Way)	8,000	7,390	.92	8,400	1.05	.0014
I-280 (btw. Alemany Blvd/ San Jose Ave)	8,000	7,610	.94	8,650	1.08	.0015
Peak Period						
Bay Bridge (I-80)	18,000	17,880	.99	19,330	1.07	.0007
Golden Gate Bridge (U.S. 101)	14,400	13,870	.96	14,850	1.03	.0006
U.S. 101 (south of Harney Way)	16,000	14,200	.89	16,530	1.03	.0011
I-280 (btw. Alemany Blvd/ San Jose Ave)	16,000	13,620	.85	15,890	.99	.0011

¹ Jefferson Associates

Source: San Francisco Department of City Planning, 299
Second Street EIR, Draft 83.311E, February 8,
1985, p. 107

2000 Cumulative Travel with the Proposed Project

The project will not create any significant changes in the level of service above the background growth expected by the year 2000. The project is anticipated to increase traffic and volume to capacity ratios of 0.06% to 0.15% along all regional auto corridors during the p.m. peak hour and p.m. peak period.

Intersection Analysis

The p.m. peak hour turning movement volumes were analyzed for the intersections at Larkin/Golden Gate, Larkin/McAllister and Hyde/Golden Gate. As shown in Table 8, these intersections generally operate at stable flows, characteristic of service level 'C' or better during the peak hour. (See Appendix B for service level definitions.) Intersection service levels are expected to decrease slightly between the years 1984 and 2000.

The project will include a 160 space parking structure, a decrease of 20 spaces in comparison to the existing on site parking facility. Therefore, the project will generate less auto traffic during peak hours and periods when compared to the currently existing on-site conditions. Intersection service levels will not be measurably affected by this decrease in traffic.

=====

TABLE 8.

EXISTING AND PROJECTED PEAK HOUR SERVICE LEVELS

<u>Intersection</u>	<u>Service Levels</u>	
	<u>1984</u>	<u>Downtown Plan (2000) + Project</u>
Golden Gate/Larkin	A	A/B
Golden Gate/Hyde	A	A/B
Larkin/McAllister	C	C/D

=====

Peak hour conditions are expected to deteriorate at all intersections by the year 2000. The Civic Center area traffic volume will increase by about 11% between the years 1984 and 2000. Table 8 shows that the intersections at Golden Gate/Larkin, Golden Gate/Hyde and Larkin/McAllister will decrease slightly in level of service by the year 2000. However, if mitigation measures for transportation impacts are implemented, intersection operating conditions would be improved.

Parking

The project would remove the 180 currently existing off-street parking spaces, but would provide 160 new parking spaces. Two off-street loading spaces and delivery docks would be provided on Larkin Street. The City's Downtown Plan discourages new long term commute parking in and around downtown. The proposed project, by eliminating 20 parking spaces on-site, would not add any new long term parking. However, the parking supply would not equal the estimated parking demand. Based upon the project's travel patterns and modal split, the parking demand would be about 151 office parking spaces, calculated as follows:

1,908 daily work trips x 22% auto/1.6 persons per auto/two one-way trips per auto = 131 long-term parking spaces.

2,858 daily non-work trips x 10% auto/1.3 persons per auto/two one-way trips per auto/5.5 turnovers daily = 20 short-term parking spaces.

The project would generate demand for about 131 long-term parking spaces and 20 short-term parking spaces. Assuming the demand for all of the 180 existing spaces would remain, the project would result in a net deficit of 171 off-street parking spaces. This unmet demand could be accommodated by the estimated 600 unused on-street and off-street parking spaces found within an approximate one-quarter-mile radius from the project site. /10/

The San Francisco Downtown Plan EIR estimates that the C-3 District would generate demand for 58,000 daily parking spaces in the year 2000, an increase of 28 percent over 1984. Short term demand would continue to be about 25 percent of the total demand. The project demand would represent less than 1 percent of the total demand for the

C-3 district. The parking supply has been assumed to be about 51,000 spaces. If vehicular demand occurs as projected, the parking deficit would be 6,000 spaces. The Downtown Plan forecasts excess auto demand, for the year 2000, in the peak hour and the peak period. If the excess demand is accommodated by transit or ridesharing, then the overall parking demand would decrease from the above estimate by about 2,300 spaces. Alternatively, if the goals of the Downtown Plan are met, total parking demand in the year 2000 would be about 48,100 daily spaces, an increase of 6 percent over 1984. If the goals were achieved, there would not be a parking deficit.

Transit Impacts

The proposed project would generate approximately 301 p.m. peak hour transit trips and a total of 496 trips would be generated during the p.m. peak period. The transit demand from the project would be between 0.06 to 0.70% of the total peak-hour travel demand on the individual transit carriers in the year 2000 depending on the transit mode (e.g. MUNI, BART, SamTrans, etc.). See Table 9.

Transit demand and capacity have been assumed to increase during the period from 1984 to 2000. The discussion of transit capacity increases for each agency are based on the Five-Year Plans and Capital Improvement Plans of the various transit agencies and are discussed in Appendix J of the Downtown Plan EIR, pp. J. 25-26, and incorporated herein by reference.

Future transit demand and loadings for the Downtown Plan in the year 2000 are shown in Table 9 for both the peak hour and peak period. The total transit demand from the project would represent about 0.35% of the total travel demand on the transit carriers in the year 2000 during the peak period.

MUNI service to the southwest and BART's Transbay service would exceed the desirable passengers per seat ratios of 1.25 and 1.30, respectively, during the year 2000 peak period. The transit demand in the two corridors in excess of the desirable loadings could be accommodated under crowded conditions. However, the excess demand is not beyond capacity. The excess demand of the desirable loadings would mean that additional transit service over that assumed to occur by 2000 would need to be provided to allow transit operations in the two corridors to meet the goals set by MUNI and BART. To meet the goal of 1.25 passengers per seat in the peak hour, MUNI would have to

Table 9.

OUTBOUND REGIONAL TRANSIT DEMAND AND SERVICE LEVELS

Transit Agency	1984			DOWNTOWN PLAN (2000)			
	Demand	P/S ¹	LOS ²	Demand	P/S	LOS	Project Percent ³
Peak Hour							
Muni							
Northeast	7,100	1.16	D	8,800	1.05	D	0.18
Northwest	8,200	1.26	E	10,100	1.25	D	0.58
Southeast	13,500	1.45	E	16,600	1.42	E	0.86
Southwest	5,300	1.06	D	7,400	1.01	D	0.70
BART							
East Bay	16,100	1.53	F	27,900	1.42	E	0.36
Peninsula	7,700	1.10	D	10,100	1.06	D	0.10
AC Transit	9,100	0.94	C	10,500	1.00	D	0.33
GGT Bus	5,300	1.00	C	8,300	0.91	C	0.36
GGT Ferry	800	0.57	B	1,500	0.30	A	0.37
Tiburon Ferry	200	0.40	A	300	0.60	B	0.33
SamTrans	1,900	1.12	D	3,100	1.19	D	0.37
CalTrain (SPRR)	3,100	0.61	B	4,900	0.79	C	0.34
Peak Period⁴							
Muni							
Northeast	12,600	1.06	D	15,800	0.96	C	0.24
Northwest	13,100	1.13	D	15,300	1.05	D	0.61
Southeast	23,300	1.31	E	29,100	1.04	D	0.88
Southwest	9,100	1.00	C	12,400	0.60	C	0.81
BART							
East Bay	25,800	1.54	F	44,600	1.14	D	0.34
Peninsula	11,300	0.80	C	14,800	0.70	C	0.16
AC Transit	14,000	0.95	C	17,200	1.17	D	0.33
GGT Bus	7,600	0.90	C	12,000	0.86	C	0.34
GGT Ferry	1,000	0.56	B	1,800	0.56	A	0.36
Tiburon Ferry	300	0.60	B	500	1.00	C	0.34
SamTrans	2,900	1.12	D	4,800	1.23	D	0.37
CalTrain (SPRR)	4,500	0.68	B	7,500	0.93	C	0.27

¹ Passengers Per Seat is the ratio of total demand to seated capacity.

² Level of Service is a scale ranging from A to F that relates P/S ratios to passenger loading conditions on transit vehicles.

³ The percent of demand generated by the project.

⁴ San Francisco Downtown Plan Proposal for adoption by the City Planning Commission as a part of the Master Plan, October 1984, (p. 100-101).

Source: San Francisco Department of City Planning, Fifth and Market EIR Draft 8331M/C, June 1, 1984, p.114, 115.

increase service by about 14% in the southwest corridor over the amount of service assumed to occur in 2000. To meet the goal of 1.30 passengers per seat, BART would have to provide a transbay service increase of 14% over the amount of service assumed to occur by 2000.

MUNI

The Downtown Plan estimates peak hour total transit demand on MUNI in the year 2000 would increase about 25% over 1984 levels in the northeast and northwest corridors. MUNI demand in the southwest corridor is expected to increase about 40% between 1984 and 2000. Peak hour demand on the other agencies is expected to increase between 30 to 70% during the period 1984 to 2000.

The proposed project would generate approximately 107 p.m. peak hour trips and 206 p.m. peak period trips. The northeast and southwest corridors will receive the greatest number of peak hour (48) and peak period (79) trips, respectively. The project will generate approximately 0.35% of the travel demand for MUNI in the year 2000 during the peak period.

Peak period increases in demand would be between 15 and 70% from 1984 to 2000. Overall peak period transit travel is expected to increase about 30% between 1984 and 2000. Peak hour and peak period passenger loadings would be worse than in 1984, although most systems would operate at acceptable conditions (level of service 'D' or better). MUNI to the southwest would be at level of service 'E' during both the peak hour and peak periods.

It is important to note that the Five-Year Plan improvements for the transit systems are designed both to provide for future demand increases and to improve service levels from existing conditions. For new vehicles to expand system capacity, rather than represent simple replacement on a one-to-one basis, operating revenues would similarly need to be increased.

BART

By the year 2000 the proposed project would generate approximately 107 p.m. peak hour and 160 p.m. peak period new BART trips. The East Bay would attract more trips than any other district, with about 100 p.m. peak hour trips and 120 p.m. peak period trips.

If transit service were increased by the year 2000 as assumed in the Downtown Plan, transit operations and passenger comfort would be slightly better than under current 1984 conditions. Peak hour and peak period passengers-per-seat ratios would be lower than 1984 ratios because service in some corridors has been assumed to increase by as much as 80% between 1984 and 2000.

If the Downtown Plan's goals regarding increased transit use were achieved, and the proposals of the Plan regarding transit service improvements were to be fully implemented, the impacts on transit agencies would be less than described above. If the goals were achieved, transit agencies would experience greater demand than this analysis implies but overall passenger loadings would be lower (and within desirable levels) because of increased transit service availability.

Pedestrian/Bikeway

The project would include one primary pedestrian entrance on Golden Gate Avenue. A second entrance will be provided from the plaza area on the project's eastern perimeter. The project would generate about 480 p.m. peak hour pedestrian trips and 875 pedestrian trips during the mid-day peak period of 11:00 a.m. to 1:00 p.m.

Existing and projected pedestrian flow conditions have been identified for sidewalks and crosswalks adjacent to the project site. These flows range from the 'open' category with no conflicts to the 'jammed' category where conflicts are unavoidable and walking becomes a shuffle. The projected flows reflect that pedestrian travel to and from the proposed project in the year 1990 would change to the 'impeded' range.

The project's parking facility would increase the potential for vehicle/pedestrian conflicts along Larkin Street. If the parking structure is used by employees, about 160 vehicles would cross the sidewalk during the peak period. The vehicles entering the structure during a peak period would be accommodated with little or no queuing (assuming self-serve or attendant-serve ticket dispensing). Inbound vehicles are not expected to block sidewalk pedestrian flows. The reduction in on-site parking from 180 to 160 spaces would decrease the number of vehicles entering and exiting the site, thereby reducing possible traffic conflicts to pedestrians, bicyclists and other vehicles.

The field observations demonstrate that the proposed project will not impact bicycle traffic within the study area.

Service Vehicles

The San Francisco Downtown Plan requires off-street facilities for freight loading and service vehicles in all new developments. The project would provide two off-street loading spaces and a delivery dock accessible at grade from Larkin Street. The proposed loading space dimensions (40 feet in width and 45 feet in length, with a vertical clearance of 14 feet) provide substantial loading space. Thus, the proposed project would meet with the requirements of the San Francisco Downtown Plan, October 17, 1985, section 152.5 for office off-street loading facilities. This section states that within C-3 Districts, 0.1 off-street freight loading spaces are required for every 10,000 square feet of gross floor area. The proposed project's freight loading needs have been calculated according to the Downtown Plan and would be:

160,500 gsf office area at 0.1 space/10,000 square feet of gross floor area = 1.6 spaces.

It is estimated that about 10 to 15 truck visits would be made to the project site between the weekday hours of 8:00 a.m. to 5:00 p.m. These truck visits would include GSA trucks, UPS trucks, food trucks, and other delivery vehicles. Under normal conditions, no accumulation, double parking or traffic back-ups should occur due to loading operations.

Mitigation Measures

The proposed project will include the following mitigation measures to reduce transportation and traffic impacts to an insignificant level:

1. Construction Impacts:

- (a) Ensure maintenance of safe and convenient pedestrian areas throughout the construction period on designated walkways around the project site;
- (b) Route construction travel away from heavily travelled streets and schedule construction traffic trips during non-commute hours whenever possible.

2. Design Impacts:

- (a) Project design shall be sensitive to pedestrian accessibility:
- (b) The parking facility would utilize warning devices to alert pedestrians to vehicles exiting the project onto Larkin Street.

3. Travel:

- (a) A survey will be conducted within a year after full occupancy of the proposed project to analyze trip generation patterns of project occupants and actual pick-up and drop-off areas for carpools and vanpools;
- (b) The State of California will initiate a transportation system management program (TSM) with goals of reducing impacts identified under this section. The program will include the following:
 - Ridesharing programs, such as computer matching for carpools and vanpools, employee outreach, and assistance in setting up carpools and vanpools;
 - Parking management programs giving preference to carpools and vanpools;
 - Work hours program, including flex-time and staggered work hours, in order to distribute trip generation over a two to three hour period instead of a short, intense peak period;
 - Transit services, including posting and distribution of schedules, maps, sale of transit tickets, passes, provision for bus shelters, etc.;
 - California State Department of General Services will install bicycle parking at the project.

Notes

- /1/ City and County of San Francisco, Department of City Planning, Transportation Element of the Master Plan, January 1983, p. 47.
- /2/ Primary vehicular streets function as major routes for automobile and truck movements into and out of the downtown area.
- /3/ City and County of San Francisco, Department of City Planning, Transportation Element of the Master Plan, January 1983, p. 47.
- /4/ Interview with Parking Attendant, November 29, 1984.
- /5/ Downtown Plan EIR, pp. IV.E. 16-18.
- /6/ Contraflow lanes are travel lanes in which the normal direction of traffic is reversed to allow transit carriers to travel a more efficient route. Contraflow lanes are restricted to use by transit carriers.
- /7/ San Francisco Department of City Planning, 229 Second Street EIR, Draft 83.311 E, February 8, 1985, p. 99.
- /8/ The proposed project will include about 144,000 net square feet of space for governmental and educational use, including office space. A State Building generally houses one employee per every 150 net square feet. Incorporating this data with the City of San Francisco's daily trip rate yields a daily trip rate of 33.1/1000. This figure was used to obtain person trip information.

/9/ The Downtown Plan EIR contains a detailed description of transportation impacts in the greater San Francisco downtown area. The information contained in this EIR is not intended to be a comprehensive summary of the transportation analysis in the Downtown Plan EIR, but instead is intended to summarize portions relevant to this proposed project and its contribution to cumulative impacts. For a comprehensive analysis of transportation impacts included in the Downtown Plan EIR, see Section IV. E, Transportation Setting and Impact, Section V. E, Transportation Mitigation and Appendix J, Transportation and Circulation Analysis and Methodologies, incorporated herein by reference and summarized in this EIR as appropriate.

/10/ Field observations by Jefferson & Associates.

III. ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES

F. AIR QUALITY

Setting

San Francisco lies within the air basin regulated by the Bay Area Air Quality Management District (BAAQMD). The City's air quality is generally more free of pollutants than that of other urban sections of the Bay Area, largely because westerly and northwesterly winds blow pollutants from the City to the east and south. These winds also reduce the potential for the City to receive pollutants from elsewhere within the region.

The BAAQMD conducts monitoring of the ambient concentrations of six air pollutants: ozone (O₃), carbon monoxide (CO), total suspended particulates (TSP), lead (Pb), nitrogen dioxide (NO₂) and sulfur dioxide (SO₂). Based on monitoring data, the Bay Area, including San Francisco, currently is designated as a non-attainment area with respect to the Federal ozone and CO standards. A five year summary of the data collected at the BAAQMD monitoring station nearest the project site (about 2.2 miles southeast at 900 23rd St.) is shown in Appendix E. /1/ In 1984, there was one violation of the State and Federal eight-hour CO standard and one violation of the Federal secondary TSP standard. In 1983, there was one violation of the Federal and State one-hour average ozone standard and four violations of the State 24-hour average TSP standard; and in 1981 there was one violation of the State 24-hour average TSP standard.

The BAAQMD has also conducted 'hotspot' monitoring to identify localized CO problems. 'Hotspot' monitoring was conducted during the winter of 1980-81 at the intersection of Geary and Taylor Streets, about 0.4 miles northeast of the project site. /2/ The observed 8-hour average concentration was 11.5 ppm, which violates the 9 ppm State and Federal standard by 2.5 ppm. The high 1-hour average concentration of 15 ppm violates neither the 20-ppm State standard nor the 35-ppm Federal standard.

San Francisco's primary air quality problems are CO and TSP. In San Francisco, the major source of CO is motor vehicles. Ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. TSP levels are relatively low near the coast, increase

in proportion to inland distances, and peak in dry, sheltered valleys. The primary sources of TSP in San Francisco are demolition and construction activities as well as motor vehicles.

San Francisco contributes to regional air quality problems, primarily ozone, in other locations within the Bay Area. Ozone is produced in the atmosphere through a complex series of photochemical reactions involving hydrocarbons (HC) and nitrogen oxides (NOx). High ozone levels occur primarily during the summer and fall. Ozone standards are violated most often in Santa Clara, Livermore and Diablo Valleys where local topography and meteorological conditions favor its accumulation.

In 1979, emissions from motor vehicles were the source of 94% of the carbon monoxide (CO), 36% of the hydrocarbons (HC), 7% of the TSP and 44% of the nitrogen oxides (NOx) in San Francisco. Power plant fuel combustion was the largest single source of sulfur oxides, about 33% of the total amount. These percentages are expected to apply to current conditions as well. /3/

San Francisco is situated in an Air Quality Maintenance Area which covers most of the metropolitan region. The 1982 Bay Area Air Quality Plan, which is part of the State implementation plan for California, has been prepared and adopted to assist the entire region in attaining air quality standards by the 1987 deadline specified in the Federal Clean Air Act. /4/ Actions called for in the Plan include stationary and mobile source emission controls and transportation improvements. The BAAQMD, Metropolitan Transportation Commission and California Bureau of Automotive Repair have primary responsibility for the Plan's implementation.

Impacts

Upon completion, the project would affect air quality in two ways. Emissions would be generated by project-related traffic and by combustion of natural gas for building space and water heating. Natural gas is a relatively clean-burning fuel; therefore, no visible plume would occur from its use. Exhaust gases would be emitted at rooftop level and would be diluted to concentrations well below the ambient air quality standards before reaching ground level. Transportation sources would account for over 95% of the project-related emissions. During its construction period, the project will generate an increase in dust (TSP). The dust will be particularly troublesome when site excavation and grading occurs during windy periods.

Projected daily emissions of pollutants from project-generated traffic in 1990, from cumulative development in the San Francisco C-3 District for the years 1990 and 2000 (as projected by the Downtown Plan EIR, EE81.3, certified October 18, 1984) and from the entire Bay Area as predicted by the 1982 Bay Area Air Quality Plan are indicated in Table 10. Project-related traffic would account for approximately 0.4% of the anticipated 1990 CO emissions generated in the C-3 Downtown Plan area and an infinitesimal portion of the total daily Bay Area emissions of CO in 1990.

Alternative 1 to the Downtown Plan (as covered in the Downtown Plan EIR) would generate about 38% more emissions in 2000 from development occurring between the years 1990 and 2000 than would the Downtown Plan. Alternative 4 would generate about 7% less emissions, and, likewise, emissions generated by alternatives 2, 3 and 5 would also fall within this range. /5/

Project-related traffic would also generate approximately 0.2-0.4% of the total daily emissions from the Downtown Plan area of hydrocarbons and nitrogen oxides. By use of the Livermore Regional Air Quality (LIRAQ) model, BAAQMD has determined the sensitivity of ambient ozone levels to hydrocarbon and nitrogen oxide emissions. The Bay Area's ambient ozone concentrations were shown to be about equally affected by changes in the emissions of hydrocarbon and nitrogen oxides. However, such changes in the emissions of hydrocarbon and nitrogen oxide have opposite effects. Increasing hydrocarbon emissions would increase ozone concentrations, while an equal increase in nitrogen oxide emissions decreases the ozone concentration by about the same amount. /6/

=====

TABLE 10.

PROJECTED DAILY POLLUTANT EMISSIONS

<u>Pollutant</u>	<u>Total Emissions (tons per day)</u>				
	<u>Project</u> ¹	<u>Downtown Plan</u> ²		<u>Bay Area</u> ³	
	<u>1990</u>	<u>1990</u>	<u>2000</u>	<u>1990</u>	<u>2000</u>
Carbon Monoxide	.21	56.0	53.5	1,952	1,883
Hydrocarbons	.02	4.7	5.0	428	428
Nitrogen Oxides	.01	6.1	5.9	558	610

1 Prepared with use of URBEMIS #1 model, State of California, Air Resources Board, Regional Programs Division. Assumes same employee trip factors and modal split factors as in transportation impacts. Assumes 20 mph non-work travel speeds and 30 mph work trip travel speeds.

2 Cumulative total emissions of C-3 District development, per Downtown Plan EIR, Table IV.I.2, page IV.I.12.

3 Cumulative total emissions of Bay Area development, per ABAG, BAAQMD, MTC, 1982 Bay Area Air Quality Plan, pp. 42, 53, and 112.

Source: Jefferson Associates, Inc.

=====

Although the project and new downtown development between 1984 and 1990 would create additional emissions, total HC, NO_x and CO emissions associated with the entire Downtown Plan study area are projected to be less in 1990 than in 1984 because declining HC, NO_x and CO emission rates per average motor vehicle (due to the continuing introduction into the vehicle fleet of new vehicles equipped with improved emission controls) would more than offset the increased number of emission sources associated with the new development.

In 1990 and 2000 (as projected by the Downtown Plan EIR), area-wide traffic volumes in the downtown area would increase by about 8% and 15%, respectively, over 1984 volumes; average traffic speeds would decrease by about 1 mph and 2 mph, respectively, from 1984 speeds. However, in 1990 and 2000 the average vehicle is expected to emit 32% and 43%, respectively, less carbon monoxide (CO) than in 1984 due to ongoing State and Federal emissions controls.

Carbon monoxide concentrations at eleven intersections in the Downtown area were analyzed in the Downtown Plan EIR. /7/ Carbon monoxide concentrations are projected to decrease at all eleven sites between the years of 1984 and 2000 with only one location (Brannan and Sixth) having carbon monoxide levels greater than the State or Federal standards.

Carbon monoxide concentrations at selected intersections affected by project-generated and cumulative development traffic (based on Downtown Plan EIR growth projections) were projected for worst-case conditions and compared with the ambient standards in Table 11. These projections were calculated using a revised version of the Modified Linear Rollback (MLR) method which was developed for the Downtown Plan EIR.

=====

TABLE 11.

PROJECTED WORST-CASE CURBSIDE CARBON MONOXIDE
CONCENTRATIONS AT SELECTED INTERSECTIONS

<u>Intersection</u>	<u>Time</u>	<u>Concentrations (ppm)¹</u>		
		<u>Downtown Plan²</u>		
		<u>1984</u>	<u>1990</u>	<u>2000</u>
Larkin/Golden Gate	1 hour	14.3	10.6	9.7
	8 hour	<u>11.9</u>	8.8	7.9
Hyde/Golden Gate	1 hour	13.6	10.2	9.4
	8 hour	<u>11.4</u>	8.4	7.6
Larkin/McAllister	1 hour	12.6	9.6	8.9
	8 hour	<u>10.8</u>	8.0	7.3

¹ Calculations for all scenarios were made using a revised version of the Modified Linear Rollback (MLR) method described in the Downtown Plan EIR. Background concentrations were calculated to be 7.4 ppm for 1 hour and 5.7 ppm for 8 hours in 1984, 6.0 ppm for 1 hour and 4.5 ppm for 8 hours in 1990, 5.7 ppm for 1 hour and 4.1 ppm for 8 hours in 2000. Underlined values are in excess of the State or Federal CO standards. The 1-hour State standard is 20 ppm, the 1-hour Federal standard is 35 ppm, and the 8-hour State and Federal standards are 9 ppm.

² Based on growth projection methodology contained in Downtown Plan EIR, Table IV.I.3, page Comments and Responses - I.8.

Source: Jefferson Associates, Inc.

=====

Currently, the 8-hour standard is estimated to be violated at all three intersections surrounding the project site (Larkin/Golden Gate, Hyde/Golden Gate and Larkin/McAllister). The projected 1-hour concentrations are within the standards. Carbon monoxide concentrations for these three intersections are predicted to be reduced in 1990 and 2000 from 1984 levels and would not violate either of the two standards.

The California State Legislature has mandated a biannual Inspection and Maintenance Program applicable to most cars and light trucks in California. The program became effective in March 1984. Vehicles must have required emission control equipment which meets standards for hydrocarbon and carbon monoxide. An Inspection and Maintenance Program was evaluated in the 1982 Bay Area Air Quality Plan based on the 1979 source inventory. The results of this plan indicated a reduction in total motor vehicle generated carbon monoxide of about 18%. The reduction in total regional CO emissions would be about 16%; the reduction in motor-vehicle generated hydrocarbons would be about 17%; and the reduction in total regional hydrocarbon emissions would be about 6%. Thus, the Inspection and Maintenance Program is expected to result in reductions in hydrocarbon and CO emissions. Since carbon monoxide concentrations in San Francisco are due almost entirely to motor vehicles, future carbon monoxide levels are predicted to be about 18% lower than would have occurred in the absence of the Inspection and Maintenance Program. Therefore, the curbside concentrations listed in Table 8 are expected to be about 18% higher than actually occur.

The project as well as other downtown development permitted under the Downtown Plan would not conflict with the pollution reduction strategies recommended in the 1982 Bay Area Air Quality Plan. This plan contains strategies which consist primarily of HC and CO emission controls on stationary sources and motor vehicles and are aimed at attaining the Federal ozone and CO standards. Cumulative downtown development is projected by the Downtown Plan EIR potentially to result in a violation of the 8-hour CO standard at the Brannan and Sixth Street intersection. The model used to make the CO projections might not be accurate to within the percentage of excess. Therefore, until additional 'hotspot' monitoring is performed to validate the model projections, a determination of whether cumulative downtown development would conflict with the objectives in the 1982 Bay Area Air Quality Plan regarding CO cannot be made.

Mitigation Measures

The various transportation system management measures identified in this EIR under Transportation, Traffic and Circulation will be enacted to reduce the project's air quality effects. These measures include encouragement of use of transit services by employees, flexible and staggered work hours, bicycle parking, ride-sharing and implementation of parking management programs. Soil and demolition materials will be watered twice daily to reduce dust by about 50%.

Notes

- /1/ Bay Area Air Quality Management District (BAAQMD), March 1985, "1984 Emissions Inventory," San Francisco, California.
- /2/ Association of Bay Area Governments, (ABAG, BAAQMD, and Metropolitan Transportation Commission (MTC), January 1982, AQMP Tech Memo 40, "Results of the 1980/81 Hotspot Monitoring Program for Carbon Monoxide," Berkeley, California.
- /3/ San Francisco Department of City Planning, 299 Second Street EIR, February 8, 1985, p. 46.
- /4/ ABAG, BAAQMD, MTC, December 1982, 1982 Bay Area Air Quality Plan, Berkeley, California.
- /5/ Impacts anticipated from cumulative downtown development have been analyzed in the Downtown Plan EIR, October 18, 1984. The air quality setting, impacts and alternatives discussion in the Downtown Plan EIR (Vol. 1, pp. VI.I.1-19 and VII.I.1-8; Vol. 2, pp. 0.1-9) is summarized in the text of this EIR and incorporated herein by reference.
- /6/ Downtown Plan EIR, Vol. I, pp IV.I.1-19.
- /7/ Downtown Plan EIR, Table IV.I.3, page IV.I.16.

III. ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES

G. CONSTRUCTION NOISE

Setting

Noise-sensitive land uses in proximity to the proposed project site include the Hastings Law Library, the State and Federal Buildings on Golden Gate Avenue and residential development to the south and north of the project site. The noise environment of the project site is dominated by vehicular traffic, including trucks, automobiles, emergency vehicles and buses. This environment is typical of downtown San Francisco and the Civic Center area. According to the Downtown Plan EIR, the area has a wide range of traffic noise levels which range from 65 - 75 dBA. /1/ /2/ /3/ The Environmental Protection Element of the Comprehensive Plan (1974) indicates a day-night average noise level (Ldn) /4/ of 70 dBA on Golden Gate Avenue and an Ldn of 65 dBA on Larkin Street, adjacent to the project site. /5/

Impacts

During the estimated 21 months of demolition, excavation and construction, increased noise levels can be expected in the surrounding area. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and listener, and presence of barriers between the noise source and listener.

Table 12 shows typical exterior noise levels associated with the different phases of construction. (See Appendix D for a table of typical noise levels found in the everyday environment.) Interior noise levels at 50 feet from the source would be about 10 to 15 dBA less than those shown in Table 12. Closed windows would reduce noise levels by about 20 to 25 dBA below those shown in the table.

=====

TABLE 12. TYPICAL COMMERCIAL/INDUSTRIAL NOISE LEVELS
AT 50 FEET

<u>Construction Phase</u>	<u>Average Noise Level (dBA)</u>
Ground Clearing	84
Excavation	89
Foundations	78
Erection	87
Finishing	89

Source: D. N. May, Ph.D., 1978, Handbook of Noise Assessment, Van Nostrand Reinhold Environmental Engineering Series, p. 211.

=====

During the approximately four weeks of demolition, it is probable that a crane with a wrecking ball would be used for some demolition work. Rubble would be loaded on trucks by front-end loaders and removed from the site. During the approximately eight weeks of excavation, jackhammers, bulldozers, front-end loaders, graders, and trucks would typically emit levels of 80-90 dBA measured at 50 feet.

It is probable that pile drivers will be required during the construction period. Conventional unmuffled and unshielded pile drivers generate significant noise levels, typically emitting noise levels of up to 105 dBA measured at a distance of 50 feet. If pile drivers are required, noise levels inside the commercial-residential buildings opposite the project site on Golden Gate Avenue would be expected to reach 92 dBA, assuming the windows were open for ventilation. Noise levels would reach about 82 dBA with windows closed. At this level, relaxed conversation would be difficult and telephone conversation could be interrupted. /6/ Noise levels inside the residential buildings behind the project site would reach about 95 dBA with windows open, while noise levels in the Hastings Law Library would reach about 85 dBA, with windows closed. Noise levels in the State office building at 455 Golden Gate Avenue would reach about 82 dBA, with windows closed.

The effects of human exposure to high noise levels have been widely studied. /7/ Sounds exceeding 35 to 40 dBA can interfere with sleep. Sounds above 60 dBA interfere

with normal speech. When sounds exceed 70 dBA, noise begins to interfere with concentration and work performance. Prolonged exposure to sounds between 90 and 100 dBA can cause hearing damage.

Impact wrenches used during the approximately 28 weeks of building erection would emit about 95 dBA at a distance of 50 feet. When impact wrenches are used, noise levels would be expected to reach 82 dBA inside the commercial-residential buildings opposite the project site on Golden Gate Avenue, with windows open. Noise levels would reach 85 dBA in residential buildings behind the project site (windows open), while noise levels in the Hastings Law Library would reach about 75 dBA (windows closed). Noise levels in the State office building would reach 72 dBA (windows closed).

Another project is currently under construction on Turk Street, between Larkin and Hyde, about 1 block from the project site. Should this project's construction schedule coincide with that of the proposed project, noise levels in the buildings opposite the site on Golden Gate Avenue would be expected to increase by about 1 dBA. This increase would not be noticeable; a 3 dBA change is considered a just noticeable difference.

Should one project be completed and a second begin soon after, noise effects would be prolonged.

Construction noise levels would be highest (other than for pile driving) during the periods of excavation and building finishing. Noise from pile driving, if required, could reach 105 dBA at 50 feet.

Mitigation Measures

To reduce impacts from construction noise, the following mitigation measures are included as part of the proposed project: The noise levels of construction equipment other than impact tools will not exceed 80 dBA at 100 feet. Impact tools (jackhammers, pile drivers, impact wrenches) must have both intake and exhaust muffled. The construction contract would require that the project contractor muffle and shield intakes and exhaust, shroud or shield impact tools, and use electric-powered rather than diesel-powered construction equipment, as feasible, so that noise emissions from equipment other than impact tools would be limited to 80 dBA at a distance of 100 feet. If pile driving is required, the College will require that the general contractor pre-drill pile holes. Pre-drilling the holes reduces the number of blows required to drive each pile home, thereby reducing the total noise exposure of the surrounding area.

In addition, the general contractor would construct barriers around the site, and around stationary equipment such as compressors, to reduce construction noise by as much as 5 dBA. The general contractor would, to the extent possible, locate stationary equipment in pit areas or excavated areas to serve as noise barriers. Construction activities would be limited to hours between 7:00 a.m. and 8:00 p.m. to reduce disturbance to residents of buildings north and south of the project site, when the noise level created increases the ambient noise condition by 5 dBA or more at the nearest property line.

Notes

- /1/ San Francisco Department of City Planning, Downtown Plan EIR, 1984 Vol. I, pp. IV.J.1-19.
- /2/ Decibel (db): A logarithmic unit of sound energy intensity. Sound waves, traveling outward from a source, exert a force known as sound pressure level (commonly called "sound level") measured in decibels.
- /3/ dBA: Decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels.
- /4/ Ldn: An averaged sound level measurement, based on human reaction to cumulative noise exposure over a 24-hour period, which takes into account the greater annoyance of nighttime noises. Noise between 10 p.m. and 7 a.m. is weighted 10 dBA higher than daytime noise.
- /5/ City and County of San Francisco, Environmental Protection Element of the San Francisco Comprehensive Plan, Transportation Noise, p. 17.
- /6/ Central Institute for the Deaf for the U.S. Environmental Protection Agency, Effects of Noise on People, 1971, pp.39, 49, 67, 68, 118.
- /7/ Bolt Beranek and Newman, Fundamentals and Abatement of Highway Traffic Noise, May 1973, pp. 1-19 to 1-22.

III. ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES

H. ENERGY

Setting

Pacific Gas and Electric Company (PG&E) supplies energy to San Francisco customers. Electrical energy is generated from various sources including oil, natural gas, hydro-electric, geothermal, nuclear, wind, cogeneration and solid waste. /1/ In future years, PG&E expects to generate electricity from these sources and from coal. The proportion of energy generated from oil and gas is expected to decrease by 1990 with corresponding increases in the proportion of energy generated from other sources listed above. /2/

Annual energy consumption by existing uses on the site, (office, retail, educational) is 0.23 million kWh of electricity and 18,938 therms of natural gas, equal to about 4 billion Btu at the source. /3/ /4/

Impacts

Removal of existing on site structures would require an unknown amount of energy. Project construction, including fabrication and transportation of building materials, worker transportation, site development and building construction would require about 380 billion Btu of energy in the form of gasoline, electricity, natural gas, and diesel fuel. /5/

The proposed project will either meet or exceed standards in Title 24 of the California Administrative Code. Title 24 establishes energy conservation standards for the design and construction of buildings. Requirements of the standard will be satisfied through the component performance standards method which requires the incorporation into a building of a set of specific design features, through the use of nondepletable energy resources, or by demonstrating that the building would consume no more than a specified quantity of energy, expressed as Btu's per square foot per year (energy budget). Wherever appropriate and economically feasible, the building will incorporate energy conserving design features.

At this stage in the project design, there is insufficient information upon which to base a building energy budget analysis for either Title 24 compliance or other

engineering purposes. Therefore, estimates of the likely energy consumption of the proposed project have been made based upon comparisons with other recent projects in San Francisco and assuming compliance with Title 24 by the energy budget method. The resulting estimates are listed in Table 13.

Daily and annual load distribution curves for the project cannot be estimated at this time due to lack of detailed design information. /6/ Because load curves are not governed by Title 24, reasonable assumptions are not readily available. However, similar projects in San Francisco for which load curves have been developed show peak electrical consumption occurs on hot August or September afternoons (due to demand for cooling). This time period coincides with PG&E's systemwide peak. Natural gas demand at other office projects within San Francisco has been predicted to peak during cold January mornings. This period does not coincide with the PG&E system-wide peak, which occurs on cold January evenings. Peak daily natural gas consumption for the proposed project is anticipated to be about 9 million Btu per day or about .0002% of the PG&E peak load of about 4.1 trillion Btu per day.

=====

Table 13. ESTIMATED PROJECT ENERGY USE /1/

Allowable Under Title 24 Energy Budget

Total annual Btu /2/ per square foot of office space	126,000 Btu per sq. ft. per year
Total annual Btu per square foot of retail space	200,000 Btu per sq. ft. per year

Daily Natural Gas Consumption /3/

Estimated daily natural gas consumption per square foot	37 Btu
Estimated peak daily natural gas consumption /4/	88 therms

Monthly Electric Consumption /5/

Estimated monthly electric consumption per square foot	1.2 Kilowatt hours
Estimated total monthly electric consumption	0.2 million Kilowatt hours

Annual Consumption

Estimated total annual natural gas consumption	20,500 therms
Estimated total annual electric consumption	2.3 million Kilowatt hours
Connected Kilowatt load	2,600 Kilowatts
Estimated total annual energy consumption (excluding transportation-related energy consumption)	25 billion Btu (4,310 barrels of oil)

Footnotes for Table 13.

- /1/ The project would include about 160,530 square feet of office space including educational offices, about 5000 square feet of restaurant space, and about 1,300 square feet of retail space. Energy use includes space conditioning, heating and lighting in accordance with allowable limits under Title 24. Estimated electricity includes an additional 3 Kilowatt hours per sq. ft. per year consumed by typewriters, computers, coffeemakers, etc., although not included in the Title 24 estimates. Transportation energy use appears in a separate table.

All calculations are based on information supplied by Sally Maxwell, San Francisco Department of City Planning, oral communication, February 1986, and are available for review at Hastings College of the Law.

- /2/ Btu (British Thermal Unit): A standard unit for measuring heat. Technically, it is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit (251.97 calories) at sea level.
- /3/ The assumed split between electricity and natural gas for office and retail (90% electricity, 10% natural gas) uses is based upon predicted consumption rates of other San Francisco projects. However, this split is sensitive to the design used; actual consumption rates may differ considerably.
- /4/ Because detailed engineering studies have not been performed for the proposed design, estimates of peak natural gas consumption are highly speculative. It is estimated that peak demand may be about 50% greater than average demand.
- /5/ The amount of electricity that would actually be used includes non-occupant loads covered by Title 24 as well as electric loads from computers, copiers and typewriters.

/Note/ Energy Conversion Factors

One gallon gasoline = 125,000 Btu

One Kilowatt (Kw) = 10,239 Btu assuming
operational efficiency of 33% for fossil
or nuclear fueled power plant.

One therm = 100,000 Btu

One cu. ft. of natural gas = 1,100 Btu at source

One barrel of Oil = 5,600,000 Btu.

=====

Project-related transportation would cause additional, off-site energy consumption (see Table 14, below). For the project trip generation described in this EIR, Transportation, Circulation and Parking section, project-related trips would require about 145,000 gallons of gasoline and diesel fuel and about 765,000 kWh of electricity annually. The total annual transportation energy demand, converted with at-source factors to a common thermal energy unit, would be about 26 billion Btu. This projected use is based upon the mix of highway vehicles in California in 1987. Vehicle fuel use is expected to decrease as the vehicle fleet becomes more efficient.

=====

TABLE 14.
PROJECT RELATED ANNUAL TRANSPORTATION ENERGY CONSUMPTION ¹

	<u>Electricity</u> <u>kw hrs</u>	<u>Gasoline</u> <u>Gallons</u>	<u>Diesel</u> <u>Gallons</u>	<u>Total Btu</u> <u>Millions</u>
Auto/Taxi/ Jitney/Motorcycle: --		129,507	--	16,188
BART: 628,055		--	--	6,430
Muni Electric: 137,470		--	--	1,407
Regional Bus Systems: --		--	12,390	1,718
SPRR --		--	2,950	409
Project Total	765,525	129,507	15,340	26,152

¹ The methods used to calculate these figures are described in detail in the Downtown Plan EIR, EE81.3, certified October 18, 1984, Appendix N and the associated data is contained in Table No. 6.

=====

Projections of electrical use for growth that would occur under the Downtown Plan EIR indicate an increase of about 210 million kWh of electricity per year between 1984 and 1990 as a result of all new development occurring in the C-3 District. /7//8/ From the period 1984 to 2000, electrical consumption rates would increase by about 330 to 350 million kWh per year above present figures, or about 120 to 140 million kWh per year above the increases estimated for the 1984-1990 period. /9/ Electric requirements for development that would occur with the alternatives analyzed in the Downtown Plan EIR would increase between 300 through 500 million kWh per year between 1984 and 2000. /10/

On the basis of growth estimates contained in the Downtown Plan EIR, the City Planning Department estimates that, between 1984 and 2000, gas consumption will grow by 470 million cubic feet (about 5 million therms) per year of which 210 million cubic feet (about 2 million therms) per year would be for office uses. /7/ /8/ Natural gas requirements for development that would occur with the alternatives analyzed in the Downtown Plan EIR would increase between 580 and 810 million cubic feet (about 6 to 9 million therms) per year between 1984 and 2000. /10/

PG&E, in examining its 10-year load growth projections for San Francisco believes that growth rates of net new office space in the downtown area will diminish from the historic figure of 1.5 million square feet per year to between 1 million and 1.2 million square feet per year. /11/ Total increased energy demand over the next decade would be approximately 200 million kWh of electricity per year. The PG&E projection cannot be compared to the projections in the Downtown Plan EIR because they cover different time periods. /12/

A comparison of the Downtown Plan and PG&E estimates of electricity use between 1990 and 2000 in downtown San Francisco is being prepared by PG&E, to be released in a report later this year. PG&E plans to meet increased San Francisco energy demands to the year 2000 are on pp. IV.G.13-14 of the Downtown Plan EIR, which are hereby incorporated by reference. In summary, that material indicates the demand increases in electricity would be met from nuclear sources, oil and gas facilities, hydroelectric and geothermal facilities, and other sources such as cogeneration, wind and imports. PG&E plans to continue receiving most of its natural gas from Canada and Texas under long-term contracts.

Mitigation Measures

The proposed project will meet or exceed standards in Title 24 of the California Administrative Code. Although no decisions concerning mitigation measures for energy consumption have been made, the following potential measures are under consideration as part of the design process:

- increased use of daylighting
- passive solar features
- load shedding
- individual fan units on each floor
- parabolic lighting
- high-efficiency ballasts for fluorescent lighting
- high-efficiency motors
- computerized energy management
- fluorescent lighting (wattmisers) using two bulbs per fixture instead of four
- energy-efficient outdoor lighting
- variable air volume space conditioning system.

Final decisions would be made on the basis of life cycle costing and compatibility with the overall design.

Notes

- /1/ Information supplied by Sally Maxwell, San Francisco Department of City Planning, June 19, 1985.
- /2/ Ibid.
- /3/ Existing energy use is based on PG&E customer billings for 1984; at-source thermal energy, given in British thermal units (Btu), is based on information from PG&E, Technical Services Department, May 10, 1984, via Sally Maxwell, San Francisco Department of City Planning, May 13, 1985.
- /4/ The British thermal unit (Btu) is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit at sea level. The term "at-source" means that adjustments have been made in the calculation of the thermal energy equivalent (Btu) for losses in energy that occur during generation, transmission, and distribution of the various energy forms as specified in: ERCDC, 1977, Energy Conservation Design Manual for New Non-Residential Buildings, Energy Conservation and Development Commission, Sacramento, California, and Apostolos, J. A., W. R. Shoemaker,

and E. C. Shirley, 1978, Energy and Transportation Systems, California Department of Transportation, Sacramento, California, Project #20-7, Task 8.

- /5/ Hannon, B, et. al, 1978, "Energy and Labor in the Construction Sector," Science 202: 837-847.
- /6/ This paragraph is based on information contained in the City of San Francisco, 299 Second Street Draft EIR, 83.311 E, February 8, 1985, p. 125.
- /7/ San Francisco Department of City Planning, Downtown Plan Environmental Impact Report, EE 81.3, certified October 18, 1984, Vol. 1, page IV.G.1-IV.G.17.
- /8/ Energy consumption factors of 18 KWh sq.ft./year and 11 cu.ft.year (about 12,100 BTU) are based on unpublished data of actual building consumption rates supplied by Sally Maxwell, Department of City Planning, personal communication, July 19, 1985, and include base power consumption of the building core (uses covered by Title 24) and power demands of electric office machines (uses not covered by Title 24).
- /9/ The Downtown Plan EIR uses a consumption rate factor of 18 kWh/sq.ft./year from 1984-1990 and 16 kWh/sq.ft./year from 1990-2000. These different factors are due to Title 24 revisions to reduce building energy budgets. These new standards would be reflected by lower electrical consumption in buildings occupied after 1990. City and County of San Francisco, 1984 Downtown Plan EIR, Vol. 1, pp. VII.G.1-VII.G.17.
- /10/ City and County of San Francisco, 1984 Downtown Plan EIR, Vol. 1, pp. IV.G.1-IV.G.17 and pp. VII.G.1-VII.G.4.
- /11/ Information supplied by Sally Maxwell, based on a March 23, 1984 letter from Ken Austin, Commercial - Industrial Marketing Supervisor, PG&E.
- /12/ PG&E's analysis of a typical office building yielded an annual consumption of about 17 kWh per sq. ft. per year which agrees with the City's estimate within the limits of estimation methodology.

III. ENVIRONMENTAL SETTING, IMPACTS & MITIGATION MEASURES

I. EMPLOYMENT AND HOUSING FACTORS

EMPLOYMENT

Setting

The project site currently supports a variety of occupations. The existing uses include a restaurant, a retail outlet, a parking lot and education. These uses generate approximately 20 jobs including 10 restaurant employees, 5 retail employees, 3 parking lot attendants and 2 custodial workers. Because the College will work with the on-site educational users to locate interim space and it is anticipated that upon completion the educational employees will be located within the project, these employees are not included within this discussion.

Within San Francisco and the Bay Area, office employment accounted for 60% of employment growth during the 1970s and presently represents more than one-half of all Bay Area jobs. The potential for continued economic growth in downtown San Francisco is influenced by many factors such as expanding regional, national and international markets for which San Francisco is already well-suited as a financial, business service and corporate headquarter center. It is also influenced by growth in Pacific Basin trade and business relationships, by increased tourism and convention activity and by downtown San Francisco's established role as a primary retail location in the region. /1/ Considering all of these factors, total employment in San Francisco's C-3 (Downtown Business) zoning district is expected to increase by about 91,000 jobs between 1984 and 2000. /2/ Calculations indicate that there will be approximately 5,400 construction jobs per year in the C-3 district between 1984 and 1990, and about 4,300 construction jobs per year between 1990 and 2000. /3/ A large amount of employment growth is expected in the Bay Area region between 1984 and 2000; however, over time, San Francisco is likely to represent a constant or declining share of total regional employment. /4/

The San Francisco Building Owners and Managers Association (BOMA) reported a citywide vacancy rate of 6.8% based on a 1984 citywide survey of 315 office buildings. /5/ This rate represents a decrease from the 7.1% rate reported by BOMA in its October 1983 survey, and an increase over

the 3.7% rate reported in 1982. According to a September 1984 Coldwell Banker survey, the vacancy rate in downtown San Francisco office buildings was 9.0%. This 9.0% rate represents an increase from 0.1% during June 1981 and 6.1% during June 1983. The surveys indicate a general trend of increasing vacancy rates for downtown San Francisco office buildings over the past three years.

Accompanying the increase in office vacancy rates with San Francisco, there has been an increased demand for office space in other parts of the Bay Area. Approximately 6.0 million square feet of office space in nine new structures is proposed for construction in Oakland over the following 10 years, approximately 17 million square feet of office space is proposed or under construction along the U.S. 101 corridor in San Mateo County, and 15.8 million square feet of office space is proposed or under construction in Contra Costa County. These totals include projects in various stages of public review, and some of the projects may not be built.

Impacts

Excavation, demolition and construction activities are expected to occur over a 21-month period. The activities would generate about 183 person years of construction labor. /6/ The jobs generated by construction activity would create additional Bay Area employment through a multiplier effect. As a result of this effect, about 284 additional person-years of employment would be generated in the Bay Area, with a portion of this secondary employment occurring within San Francisco. /7/

During the project construction period, the currently existing on-site jobs would be eliminated. Because the College will work with the on-site educational workers to locate satisfactory interim space and it is anticipated that upon project completion the educational workers will be located within the proposed project, these workers are not included within this discussion. In addition, there are about 20 retail and commercial workers on site. While the proposed project would effect these jobs, the effect is not considered significant because the number of new on-site employees upon project completion will be greater than the number of workers presently on-site. The proposed project would include retail and restaurant space which will provide similar replacement jobs for retail and restaurant workers. At this time in project design it is not certain which restaurant will be located within the proposed project although the option remains open that the current restaurant facility would be located within the project.

At full operation, it is anticipated that the proposed project would provide about 992 on-site jobs for government, education, retail, restaurant and maintenance workers. These would include about 960 government and education employees (based on one worker per 150 net sq. ft. of governmental and educational space for 144,000 net sq. ft.), 14 restaurant workers (based on one worker per 350 gross sq. ft. for 5,000 gsf), 4 retail workers (based on one worker per 350 gsf for 1,280 gsf), and 14 janitorial/facility workers (based on one worker per 12,000 gsf for the entire building). At this stage in project design it is not known whether the parking facility would utilize parking operators or attendant-serve ticket dispensing and for this reason parking employees are not included within the estimated numbers of project employees. /8/

During the proposed project construction period, the current on-site commercial, restaurant and parking facilities will be eliminated. However, within the project vicinity there are other commercial, restaurant and parking facilities which are available. There is also additional space available within the neighborhood which could be leased by these commercial users.

Other than the jobs generated by construction activities and by new retail and commercial employment, the proposed project would not create direct employment within the City of San Francisco because the governmental office workers would be moving to the project site from other dispersed locations within the City. In some cases, certain government offices would remain at their current location; only those employees creating an overcrowding condition at those offices would be moved to the proposed project.

If the governmental workers relocating to the project site were to vacate their current offices, and if the vacated office space were to be leased to employees new to San Francisco, total employment within the City could increase through the indirect effect of backleasing vacated office space. The actual disposition of the vacant office space is the responsibility of owners of the vacated space and would be outside the control of the College. At this time it is unknown whether the project would indirectly cause vacated office space and if vacated office space were to result, future leasing of this space is both unspecified and uncertain. For this reason, the impacts associated with potential vacated office space are too speculative for evaluation in this EIR.

Mitigation Measures

No mitigation measures are necessary because the proposed project would not have a significant impact on employment. The current on-site commercial and retail users have occupied the premises with the understanding that they have received all relocation benefits or any in-lieu of benefits which they may be entitled to or with the understanding that the College might construct a new facility on the site. They have been contacted by the College and have knowledge of the College's plans to construct the proposed project. They will receive advance notice to vacate the premises, and, at a minimum, this notice will be the time specified in their agreements with the College.

HOUSING

Setting

There were about 320,230 housing units in San Francisco as of January 1984, according to the State Department of Finance. /9/ About two-thirds of the stock is rented and one-third is owner occupied. Housing production in the City (as measured by building permits issued) has been predominantly multi-family units. Between 1978 and 1980, 84 - 87% of residential building permits were for multi-family units and in 1981 that figure increased to 95%.

The nature of the multi-family housing stock (including townhouses, condominiums and apartments) in the City is changing because of conversion of rental units to condominiums and conversion of residential hotels to other uses. Under the Subdivision Code as revised in 1982, the City allows conversion of 200 units of rental housing to condominiums per year. In 1981, about 40 percent of rental units converted to condominiums were estimated to be owner-occupied. It is further estimated that from 1975 to 1980, approximately 3,700 residential hotel units were demolished or converted to commercial or tourist uses.

Housing demand in San Francisco has heightened over the past decade. The number of households increased by 1.3 percent from 1970 to 1980, despite a 5.6 decrease in total population. This reflects a decrease in the average size of households in San Francisco from 2.34 persons to 2.19 persons, which is a trend typical of many areas during this time. Although the number of housing units in the City increased by 1.9 percent over this period, by 1980 the vacancy rate, which indicates the balance between housing

supply and demand, remained low at about 0.6 percent for owner-occupied housing and about 2.7 percent for rental housing.

The average market value of a single-family house in the Bay Area was about \$143,400 in 1983; the 1983 average in San Francisco was about \$156,600. San Francisco experienced the greatest increase in average market value of all Bay Area cities over the past five years. In 1980 the median contract rent was \$267, which in 1983 dollars would amount to more than \$375.

The percentage of San Francisco's employed population that lives in the City has decreased from more than 80 percent in 1970 to 75 percent in 1980. This suggests that fewer people who are finding work in the City are also finding housing here. The Department of City Planning projects that as many as 40 percent of office workers would desire to move to San Francisco upon finding work in the City.

The expansion of downtown office space is a source of pressure on San Francisco's housing demand together with the above-noted decrease in household size; increased land, labor, and materials costs; immigration from abroad; high interest rates; and limited land for housing. There are also regional housing impacts. There were just over two million housing units in the nine-county Bay Area in 1980. About one-third of the units are in the East Bay (Alameda and Contra Costa counties), about one-third on the Peninsula (San Mateo and Santa Clara counties, about 16 percent in San Francisco, 10 percent in the North Bay (Marin and Sonoma counties) and 6 percent in Solano and Napa counties.

The limited information available on housing production in Bay Area counties suggests that the markets have been depressed in recent years. Regionally, single-family permits declined in 1979, 1980 and 1981. In Alameda, Contra Costa, San Francisco, San Mateo and Sonoma counties single-family permit issuances rose from 1978 to 1979, but then declined in 1980. Regional multi-family rental unit permits have declined every year between 1977 and 1981. Conversely, condominium permits increased between 1977 and 1980 and decreased in 1981. The housing recovery trend in the Bay Area during the fourth quarter of 1983 showed a gain of 99 percent over the level reported during the fourth quarter of 1982 for total permits issued.

The proposed project is within the North of Market Area. The 1980 U.S. Census of Population and Housing reports about 15,000 housing units in the North of Market area. /10/ Most of these are in large apartment buildings and residential hotels. Over 60 percent are in buildings with more than 50 units. Less than 2 percent of the units were reported to be owner-occupied, compared to 32 percent city-wide. The vacancy rate was reported to be 11 percent, which is twice the citywide figure. Over 40 percent of all residential units in the North of Market Area are hotel rooms, and are concentrated in the C-3-G district. (Portions of this district have been rezoned to a residential special use district.) These residential units are small: 87 percent have only 1 or 2 rooms. Households are small in size too, since 70 percent of the units are occupied by only 1 person. According to the 1980 Census, rents in the North of Market Area are considerably lower than the citywide average, even though they are high on a per-room basis. This reflects the fact that the units in the North of Market area are much smaller than those in the rest of the City. This housing is among the lowest priced in the City. /11/

During the period 1975-80, the North of Market area lost a total of 19 hotels representing a loss of 1,087 rooms. /12/ This loss was primarily due to demolition or conversion. However since 1980, about 1,830 units have begun to be restored to safe and habitable conditions. /13/

Impact

The proposed project would result in the demolition of four existing structures. Two of these structures were used as residential units until 1978. Although the lower floors of these structures are currently used for commercial purposes, the upper floors are unoccupied, uninhabitable and in an unsafe condition for residential use. The proposed project involves no residential relocation. See this EIR, Community Controversy for a discussion of this issue.

Upon project completion and full operation, about 32 restaurant, retail and janitorial/facility workers and 960 educational and governmental workers will be employed at the project site. The retail, restaurant and janitorial/facility workers could create a demand for housing within San Francisco. The governmental workers will be moving to the project site from dispersed locations throughout the City and, therefore, these workers would not create a demand for housing because it is assumed that they will

continue to reside in their present locations. The educational employees are presently located on the project site or working within the College and for this reason it is also assumed that they will continue to reside in their present locations.

The proposed project could have an indirect effect on housing in San Francisco if governmental workers moving to the project were to vacate their present offices and if the vacated office space were to be leased to employees new to San Francisco. This housing demand, however, is unspecified and uncertain and impacts associated with it are too speculative for evaluation in this EIR.

Mitigation Measures

The proposed project would not directly or significantly affect the housing market within San Francisco and no mitigation measures are required.

Notes

- /1/ San Francisco Department of City Planning, Downtown Plan Final Environmental Impact Report, certified October 18, 1984, Page I.C.1.
- /2/ Ibid, p. I.C.3.
- /3/ Ibid, p. I.C.4.
- /4/ Ibid, p. I.C.5.
- /5/ Both this paragraph and the one immediately following are taken from the San Francisco Department of City Planning, 100 First Street Draft EIR, February 1, 1985, pp. 56-57.
- /6/ An estimated \$23,000,000 (hard costs) would be spent during construction. Employment estimate assumes labor costs would be about 30% of the total including direct wages, payroll taxes and fringe benefits at an annual cost of \$37,800 per construction worker. Estimate based on information in Embarcadero Center West EIR, December 28, 1984.
- /7/ Multiplier is based on that used in the Embarcadero Center West Draft EIR, 83.222E. Construction employment multiplier is 1.55.

- /8/ Retail and maintenance employment factors based on data contained in 299 Second Street Draft EIR, 83.311 E, February 8, 1985, p. 134.
- /9/ The beginning seven paragraphs in this section are taken from San Francisco Department of City Planning, 299 Second Street Draft EIR, February 8, 1985, pp. 49-51.
- /10/ San Francisco Department of City Planning, North of Market Rezoning Study, March 1983, p. 35.
- /11/ Ibid.
- /12/ San Francisco Department of City Planning, A Study of the Conversion and Demolition of Residential Hotel Units, November 1980, p. 17.
- /13/ San Francisco Department of City Planning, North of Market Rezoning Study, March 1983, p. 36.

IV. GROWTH INDUCEMENT

The proposed project would include about 160,530 gross square feet (gsf) of educational and governmental space, including offices (a net increase of about 150,000 gsf), and about 6,280 gsf of retail and restaurant space (a net decrease of about 10,320 gsf). Employment at the site would increase from about 90 employees including educational, retail and restaurant workers to about 990 employees, an increase of about 900 people. Occupants of the project site are anticipated to include the on-site educational workers plus additional educational and governmental employees. At this time in project design it is not certain which restaurant will be located within the project although the option remains open that the current restaurant facility will be located within the project. It is probable that the governmental agencies locating within the project will relocate to the site from other locations within the City of San Francisco. It is also likely that these governmental workers will not be vacating their current locations, but instead, the project will create expansion space to fill the need created by current conditions of overcrowding. Therefore, the increase in employment at the project site does not necessarily represent employment which is new to San Francisco. However, if the governmental workers relocating to the project site were to vacate their current offices, and if the vacated office space were to be leased by employees new to San Francisco, total employment within the City would increase through the indirect effect of backleasing vacated office space. For a further discussion of this issue, see this EIR, Section III, I, Employment and Housing Factors. To the extent that possible vacated office space would attract new workers and residents to San Francisco, the demand for commercial, social and municipal services would be increased. This demand, however, is expected to occur over the long term, because the City of San Francisco presently has an office vacancy rate of 10.9% /1/

Excavation, demolition and construction activities are expected to occur over a 21-month period and generate about 183 person-years of employment. The jobs generated by construction activity would create additional Bay Area employment through a multiplier effect. As a result of this effect, about 284 additional person-years of employment would be generated in the Bay Area, with a portion of this secondary employment occurring within San Francisco.

Employment growth on the project site, however, would not be reflected directly in increases in demand for housing and City services because the anticipated project employees are already employed or living within San Francisco.

Any net increase in employment within the downtown area would increase the demand for retail goods and services in the area. The project would increase this demand by increasing the numbers of employees on site. However, a restaurant and retail facility would be included as a part of the proposed project and would help to offset the increased demand for retail goods and services.

Notes

- /1/ Coldwell Banker Survey, "Office Building Real Estate," March 31, 1985.

V. RELATIONSHIP BETWEEN EXISTING PLANS AND POLICIES AND THE PROPOSED PROJECT

This section discusses the relationship between the proposed project and existing plans and land use controls for the project area. The controlling plan for the State of California is the Facilities Plan and the controlling plan for the City of San Francisco is the Downtown Plan. Although both the owner and probable primary user of the proposed project are not subject to local regulations, this section is included within this EIR for purposes of determining potential significant environmental impacts.

A. STATE OF CALIFORNIA SAN FRANCISCO FACILITIES PLAN

One of the objectives of the Facilities Plan is to consolidate State agencies which are not directly involved in neighborhood services in a central location within San Francisco.

Through consolidation of governmental agencies within the Civic Center area, the proposed project will increase economic, energy and space efficiencies and will promote greater employee use of carpools, vanpools and transit.

B. CITY AND COUNTY OF SAN FRANCISCO DOWNTOWN PLAN OCTOBER 17, 1985

The relationship of the proposed project to major controls in the Downtown Plan is summarized in Table 15, on the following page.

TABLE 15. COMPARISON OF PROPOSED PROJECT WITH THE DOWNTOWN PLAN

Major Controls	Proposed Project	Downtown Plan
Height Limit	80-feet	80-feet
FAR (Section 124)	5.6:1	6:1
Recreation/Open Space (Section 138)	4,100 sq. ft. on project site; 13,000 sq. ft. including on-site open space, sculpture garden adjacent to College law Library and plaza extension from Golden Gate Avenue to McAllister Street. Additional open-space buffer comprising about 3,100 square feet to be built on site's southern perimeter.	No open-space required for institutional uses. For office use in C-3-G District, 1 sq. ft. open space / 50 sq. ft. of gross floor area.
Sunlight Access to Public Sidewalks in C-3 District. (Section 146)	Project created shadow impacts would be greatest on sidewalks immediately adjacent to the project on Golden Gate Ave. Shade impacts, however, would vary with the time of day and season. See this EIR, <u>Shadow</u> .	Requires new buildings to be shaped, without unduly restricting development potential, to reduce substantial shadow impacts on public sidewalks.
Reduction of Shadows on Public Open Spaces in C-3 Districts. (Section 147)	During winter months in morning hours, about 2% of the plaza in front of Federal Building on Golden Gate Avenue will be shaded. By noon, all shade will be eliminated. At no time would the project cast shade on the Civic Center Plaza or the United Nations Plaza.	Requires new buildings to be shaped, without unduly restricting development potential, to reduce substantial shadow impacts on public open space.

Major Controls	Proposed Project	Downtown Plan
Wind (Section 148)	The project will not cause ground level wind speeds in excess of 11 m.p.h. in areas of substantial pedestrian use and 7 m.p.h. in public seating areas.	New developments will not cause ground level wind speeds in excess of 11 m.p.h. in areas of substantial pedestrian use and 7 m.p.h. in public seating areas.
Incorporation of Art (Section 149)	The College has a vast supply of works of art and will display various pieces within the project.	Requires works of art costing an amount equal to one percent of construction cost.
Off-Street Loading (Section 152.5)	Two off-street loading spaces provided by project.	0.1 space per 10,000 sq. ft. of gross floor area.
Off-Street Parking Fee Structure. (Section 155 (g))	The project parking facility, although primarily intended for use by the College and project employees, will allow short-term parking to the extent possible.	Off-street parking shall maintain a fee structure which includes short-term parking.
On-Site Transportation Brokerage Services. (Section 163)	The State of California will initiate a transportation system management program.	Project sponsor required to provide on-site transportation brokerage services for actual lifetime of project.
Child-Care Brokerage Services. (Section 165)	The College currently provides child care services through contract with a nearby facility located two blocks from the project site.	Project sponsor required to provide on-site child care brokerage services for actual lifetime of project.

C. UNIVERSITY OF CALIFORNIA
HASTINGS COLLEGE OF THE LAW
LONG RANGE DEVELOPMENT PLAN

In January of 1977, the College had a long range development plan which envisioned the construction of the Hastings Law Center. One phase of this plan, the construction of the College Academic/Library Facility, was completed. The other phases of the plan were expressly or by implication abandoned. The proposed project as described in this Draft EIR supersedes all prior College plans for the development of the project site.

Other than the proposed project as described in this Draft EIR, the College has no present plans to acquire additional property or engage in major construction on the property it now owns.

VI. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

This chapter is subject to final determination by the University of California, Hastings College of the Law as part of the certification process. If necessary, this chapter will be revised in the Final EIR to reflect findings of the College.

All project-specific impacts that have been identified in this Draft EIR have been mitigated to an insignificant level. Mitigation measures included as part of this project are described in Section II, Environmental Setting, Impacts & Mitigation Measures, and in the Initial Study, attached as Appendix A to this EIR.

Cumulative development in Downtown San Francisco would have a significant effect on the environment insofar as it would generate cumulative traffic increases and passenger loadings on Muni, BART, and other regional transit carriers. These cumulative transportation impacts would cause violations to total suspended particulate and localized carbon monoxide standards in San Francisco. The proposed project would contribute to cumulative impacts.

VII. RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY

The proposed project would contribute to cumulative development within San Francisco. By replacing the four structures currently located on the project site, the proposed project would alter the general character of the block.

The project site, along with surrounding areas, presently supports a variety of land uses including educational and governmental functions and commercial and residential uses. The proposed project would be compatible with educational and governmental functions, but would irretrievably commit the project site to land use other than residential.

If the project site were reserved for future, alternative use, the existing on-site structures would remain; however, it is improbable that the former residential hotels would be renovated because it is economically prohibitive to do so and would preclude efficient use of scarce land resources. Demolition of the on-site structures and construction of a project at a future date would involve increased costs and would result in the project site remaining in an underdeveloped state.

Long-term productivity within the project vicinity would be increased through the development of the proposed project. Through the consolidation of governmental agencies within the Civic Center area, economic, energy and space efficiencies would be increased and greater employee use of carpools, vanpools and transit would occur.

VIII. COMMUNITY CONTROVERSY

Community controversy exists concerning the proposed construction of the Golden Gate Building. Areas of controversy are discussed in this section of the EIR. Community controversy centers around the use of the project site for governmental and educational instead of residential use, College objectives to be served by the proposed project, College long-range development plans, alternatives to the proposed project and possible environmental impacts associated with the project. However, where issues are analyzed in other portions of the EIR the discussion of those issues will not be duplicated here.

HOUSING

In the early 1970's UC Hastings experienced severe conditions of overcrowding. More space was needed for the students, faculty and library. The College was able to purchase several buildings on the block bounded by Hyde, Golden Gate, Larkin and McAllister Streets. The buildings were either empty or used for commercial or residential purposes.

In January of 1977, at the time of completion of the Draft EIR for the Proposed Hastings Law Center, the College had a proposed long range development plan. This plan envisioned the construction of the Academic/Library Facility, a Legal Affairs Facility and a Plaza. However, the plan as originally contemplated was altered in July 1977 at the time of completion of the Final EIR for the proposed Hastings Law Center. Specifically, construction of the Plaza had been abandoned partly due to impacts associated with the extensive relocation of the residents living on the north side of McAllister street. The Final EIR for the Proposed Hastings Law Center stated that the Law Center would be constructed in two stages, the first stage consisting of the construction of the Academic/Library Facility, and the second stage being the construction of the Legal Affairs Facility. A supplement to that EIR was to be prepared when final plans were developed for the Legal Affairs Facility. Although the College hoped to construct a Legal Affairs Facility it was not committed to a specific course of action concerning the construction and use of the proposed facility.

In 1979 UC Hastings abandoned its plan to build a Legal Affairs Facility due to financial constraints. However, prior to the abandonment of this plan the College wanted to empty the residential hotels situated on lots 12 and 14 because the hotels were unsafe, and in a condition of disrepair. Additionally, the properties were unsuited for residential use because they were constructed with unreinforced brick masonry and might not withstand an earthquake.

The College renovated the structures located at 270 and 260 McAllister Street and provided residential units to be offered to tenants of the residential hotels located on lots 12 and 14. Because the structure situated at 270 McAllister Street was empty when the College purchased it, the College provided an additional 80 housing units through the renovation of this structure. Furthermore, the College provided 10 additional housing units at 260 McAllister Street. Thus, a total of 90 new units were added to the housing market to replace the 85 unsafe units lost from lots 12 and 14.

One of the mitigation measures adopted by UC Hastings in its Final EIR dated July 1977 was the provision of comparable dwellings to replace each dwelling demolished in the construction of the proposed Legal Affairs Facility. A second mitigation measure was to provide relocation assistance to the tenants eligible for such assistance. The College has met both of these mitigation measures through the provision of 90 housing units and the offer to eligible tenants of lifetime rent supplements, moving expenses and other benefits.

The movement of persons from lots 12 and 14 is the subject of current litigation, McKeon, et. al. v. Hastings College of the Law. A judgment was issued in this case against the College by the Superior Court of the City and County of San Francisco on July 2, 1982. Although the College removed 85 uninhabitable units from the market while providing 90 additional residential units, the trial court judgment stated that the College must provide an additional 375 units of comparable replacement housing. This judgment did not require the College to provide these units on any specific site. However, the judgment is currently on appeal and at such time as the appellate process is completed the College will abide by the decision. At no time, however, was the College required to provide housing units on the site of the proposed Golden Gate Building.

On March 28, 1985, the Board of Supervisors of the City of San Francisco established boundaries to create the North of Market Residential Special Use District. The purpose of the rezoning of the North of Market District was to protect and enhance housing resources and to conserve and upgrade existing housing stock. However, the site of the proposed project was specifically omitted from this classification and remains zoned C-3-G (Downtown General Commercial), while the residential units located on the northern side of McAllister Street on the project site's southern perimeter were rezoned as a North of Market Residential Special Use District.

In any event, the College examined the feasibility of rebuilding the structures on Lots 12 and 14 to provide housing on the project site. This possibility was rejected because it was economically prohibitive and would not carry out the objectives of this proposed project.

IX. ALTERNATIVES TO THE PROPOSED PROJECT

A. ALTERNATIVE A: NO PROJECT

Description of Alternative

This alternative would involve no change to the project site as it currently exists. Four structures and a two-level parking lot would remain presumably with the same land use and in the same condition. Future options for development of the project site would remain open with this alternative.

Distinctive Environmental Characteristics of Alternative

With retention of the project site in its currently existing condition, the environmental characteristics of this alternative would be similar to those described in the Environmental Setting sections of this EIR. Construction noise impacts would not occur nor would the demolition of the on-site structures. Transportation, transit and air quality characteristics would remain unchanged for the project site. Likewise, shadows, winds and site views would remain unchanged. Demand for energy would remain equal to that of the existing site. Employment would not increase at the project site and there would be no increased demand for commercial services such as retail and restaurant facilities. Three structures rated "D" and one structure rated "C" by the Foundation for San Francisco's Architectural Heritage would remain in place. Revenues from, and costs of, development of the site would not occur. An open-space plaza would not be built.

Reasons for Rejection of Alternative

The College has rejected this alternative because needed space for educational functions would not be built. Additionally, the most efficient land use of the project site considering its location adjacent to the College Law Library and close proximity to other governmental agencies and the Civic Center area would not be achieved without developing the site.

B. ALTERNATIVE B: SIX-STORY STRUCTURE/NO PLAZA

Description of Alternative

A six-story structure extending to all lot lines would be developed on Lots 10, 11, 12, 13, 14 and 15 of Assessor's Block 347, bounded by Hyde, Golden Gate, Larkin and McAllister Streets. An open space plaza on the site's eastern perimeter and an additional open space buffer area separating the proposed structure from the residential units on the southern edge of the site would not be built. This alternative would include a two-level below ground parking facility and a restaurant and conference room on the ground level. Upper floors of the structure would be used for educational and governmental space, including offices. As with the proposed project, this alternative would require the demolition of the currently existing on-site structures and the parking facility. Total building area for this alternative would be about 281,000 square feet, as described below:

Educational and Governmental Space	--	208,000 gsf
Restaurant and Retail	--	6,300 gsf
Parking	--	67,030 gsf

Distinctive Environmental Characteristics of Alternative

Archaeological, historical and construction noise impacts associated with this alternative would be the same as the proposed project. Energy demand would be increased due to the increased size of the structure and the corresponding increase in number of on-site employees. Transportation, circulation, parking and air quality impacts would be proportionately greater than those of the proposed project because this alternative would have increased office space of about 23%. For the same reason, there would be a corresponding increase in demand for retail and restaurant services in the project area. Because this alternative would fill all lot lines to their maximum dimensions, shadow impacts would be slightly greater than that of the proposed project. With this alternative, wind speeds would range from 4.8 to 11.7 miles per hour.

Reasons for Rejection of Alternative

The College has rejected this alternative because an open space plaza on the eastern lot line and an additional open space buffer separating the project from the residential units on the site's southern perimeter would not be built. The College has determined that an open space buffer on the southern perimeter is necessary in order to minimize impacts associated with the increased intensity of the land use on the project site. In addition, the open space plaza between the project and the College Law Library would benefit project occupants and the surrounding area.

C. ALTERNATIVE C: TEN-STORY STRUCTURE NO STEP-BACKS ON UPPER TWO LEVELS

Description of Alternative

A ten-story building, 130-feet in height would be developed on Lots 10, 11, 12, 13, 14 and 15 of Assessor's Block 347. The structure would extend to northern and western lot lines. An open space plaza would be located on the eastern and southern perimeters. The plaza would be slightly elevated above Golden Gate Avenue and would comprise about 15,000 square feet. The plaza would extend 64 feet from the building to the College's sculpture garden adjacent to the College Law Library; additionally, the open space buffer located on the southern perimeter would be 27.5 feet in width. This alternative would include a two-level below ground parking facility and would include a restaurant, retail space and conference room on the ground level. Upper floors of the building would be used for educational and governmental space, including offices. This alternative would require the demolition of the currently existing on-site structures and the parking lot. Total building area for this alternative would be about 280,000 square feet, as described below:

Educational and governmental space	--	205,000 sq. ft.
Restaurant and Retail	--	6,300 sq. ft.
Parking	--	67,030 sq. ft.

Distinctive Environmental Characteristics of Alternative

Archaeological, historical and construction noise impacts associated with this alternative would be similar to those of the proposed project. Energy demand would be greater than that of the proposed project due to increase

in size of the structure and the corresponding increase in number of on-site employees. For the same reason, transportation, circulation, parking and air quality impacts would be proportionately greater than those of the proposed project. Additionally, there would be a corresponding increase in demand for retail and restaurant services within the project area. With this alternative, wind speeds would range from 4.8 to 13.7 miles per hour. Shadow impacts would be increased on Golden Gate Avenue throughout the fall, winter and spring months.

Reasons for Rejection of Alternative

The College has rejected this alternative because the predicted wind speed at the northeast corner of the intersection of Golden Gate Avenue and Larkin Street would reach 13.7 miles per hour.

D. ALTERNATIVE D: 10-STORY STRUCTURE WITH STEP-BACKS ON UPPER TWO LEVELS

Description of Alternative

This alternative consists of a 10-story structure, 130-feet in height. The building would extend to northern and western lot lines and an open space plaza would be located on the site's eastern and southern perimeters. The plaza would extend 64 feet from the building to the College Law Library on the east and would extend 27.5 feet to the residential units on the south. Total square footage for this plaza area would be about 15,000 square feet. This alternative would include a two-level parking facility below ground and would include a restaurant, retail space and conference room on the first level. Upper floors of the building would be used for educational and governmental purposes, including office space. As with other alternative projects, demolition of the currently existing on-site structures and the parking lot would be required.

The upper two floors of this alternative would include step-backs and roof terraces, shaping the building at the top.

Total building area for this alternative would be about 264,000 square feet, as described below:

Education and governmental space	--	191,000 sq. ft.
Restaurant and Retail	--	6,300 sq. ft.
Parking	--	67,030 sq. ft.

Distinctive Environmental Characteristics of Alternative

Archaeological, historical and construction noise impacts would be similar to the impacts of the proposed project. Energy demand would be greater than that of the proposed project due to the increased size of the building and the corresponding increase in anticipated numbers of on-site employees. Likewise, transportation, circulation, parking and air quality impacts would be proportionately greater than those of the proposed project. An increased demand for retail and restaurant services within the project vicinity would also be expected.

Wind impacts would be decreased with this alternative as compared to Alternative C, described above. Specifically, the highest wind speed for the 15 analyzed locations within the project vicinity occurs at the northeast corner of the intersection of Larkin Street and Golden Gate Avenue. Through the creation of step-backs and roof terraces on floors 9 and 10 of this alternative, wind speed at the northeast corner of Larkin and Golden Gate was reduced from 13.7 mph to 11.8 mph.

Shadow impacts associated with this alternative have also been analyzed. This structure would not cast shade on any property under the jurisdiction of the Recreation and Park Commission. It would, however, increase morning shadow on the intersection of Golden Gate Avenue and Larkin Street from the months of September through March. During the fall, winter and spring months this alternative would cast shade on portions of the sidewalk area on Golden Gate Avenue. Throughout the summer months, this alternative would not cast shade on sidewalk areas on the northern side of Golden Gate Avenue across from the project site. At no time of the year would this alternative cast new shadows on the residential structures situated on the site's southern perimeter.

Reasons for Rejection of Alternative

This alternative exceeds the City's height limitations for the project site by 50 feet. Other potential significant impacts associated with this alternative would be reduced to an insignificant level through mitigation measures incorporated as a part of the project design. Both the plaza adjacent to the eastern perimeter of the site

as well as the additional buffer area separating the project from the residential units to the south are larger than the open space areas in the proposed project. The College still considers Alternative D to be its preferred project. However, in a spirit of cooperation with the City of San Francisco, this alternative was rejected in favor of the proposed project.

X. DISTRIBUTION LIST

State Agencies

Don Rake
Air Resources Board
General Projects Section
P. O. Box 2815
Sacramento, CA 95814

J. M. Ellis
District CEQA Coordinator
Department of Transportation
District 4
P. O. Box 7310
San Francisco, CA 94120

Mr. Hans Kreutzberg
Office of Historic Preservation
P.O. Box 2390
Sacramento, CA 95811

Dennis O'Bryant
Department of Conservation
1416 - 9th Street, Room 1326-2
Sacramento, CA 95814

James M. Doyle
Department of Parks and Recreation
P. O. Box 2390
Sacramento, CA 95811

Eric Maher
California Waste Management Board
1020 - 9th Street, Room 300
Sacramento, CA 95814

Bill Murphy
Department of Housing and
Community Development
921 - 10th Street, 5th Floor
Sacramento, CA 95814

Mike Burke
Public Utilities Commission
350 McAllister Street
San Francisco, CA 94102

Legislative Analyst

Mr. William G. Hamm, Legislative Analyst
Legislative Budget Committee
925 L Street, Suite 650
Sacramento, CA 95814

Legislators

Assemblyman Willie L. Brown, Jr.
State Capitol, Room 219
Sacramento, CA 95814

Assemblyman Art Agnos
State Capitol, Room 3151
Sacramento, CA 95814

Assemblyman Art Agnos
350 McAllister Street, Room 1064
San Francisco, CA 94102

Senator John F. Foran
State Capitol, Room 4076
Sacramento, CA 95814

Senator Milton Marks
State Capitol, Room 2070
Sacramento, CA 95814

Regional Agencies

Association of Bay Area Governments
P. O. Box 2050
Oakland, Ca 94604

Milton Feldstein
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

California Archaeological Site Survey
Regional Office
Northwest Information Center
Department of Anthropology
Sonoma State University
Rohnert Park, CA 94928

City and County of San Francisco

Barbara Sahn
San Francisco Department
of City Planning
450 McAllister Street
San Francisco, CA 94102

Sally Maxwell
San Francisco Department
of City Planning
450 McAllister Street
San Francisco, CA 94102

Lee Woods
San Francisco City Planning Commission
450 McAllister Street
San Francisco, CA 94102

Tony Rosenblatt, President
Susan Bierman
Roger Boas
Norman Karanick, Alt.
Jerome Klein
Yoshio Nakashima
C. Mackey Salazar
Douglas G. Wright, Alt.

Jonathan Malone
Landmarks Preservation Advisory Board
450 McAllister Street
San Francisco, CA 94102

Philip P. Choy
Elizabeth de Losada
David M. Hartley
Carolyn Klemeyer
Jean E. Kortum
Patrick McGrew
Ann Sabiniano
Walter Sontheimer
John Ritchie

Eric Shapiro
Office of Supervisor Walker
Board of Supervisors
City Hall
San Francisco, CA 94102

Robert Levy, Superintendent
Bureau of Building Inspection
450 McAllister Street
San Francisco, CA 94102

Paula Jesson, Deputy City Attorney
City Attorney's Office
Room 206, City Hall
San Francisco, CA 94102

Hal Bruno, Assistant Manager
Water Department
Distribution Division
425 Mason Street
San Francisco, CA 94102

Scott Shoaf
San Francisco Department of Public Works
Traffic Engineering Division
460 McAllister Street
San Francisco, CA 94102

Tim A. Molinare
San Francisco Department of Public Works
Bureau of Engineering
Division of Streets and Highways
45 Hyde Street, Room 208
San Francisco, CA 94102

Frank H. Moss, Jr., Deputy Director
for Engineering and City Engineer
San Francisco Department of Public Works
City Hall, Room 351
San Francisco, CA 94102

Vijay K. Gupta
San Francisco Department of Public Works
45 Hyde Street, Room 222
San Francisco, CA 94102

Ed Phipps, Chief
Division of Planning and Research
San Francisco Fire Department
260 Golden Gate Avenue
San Francisco, CA 94102

Peter Straus
San Francisco Municipal Railway
MUNI Planning Division
949 Presidio Avenue, Room 204
San Francisco, CA 94115

Barbara Moy, Assistant Director
Public Utilities Commission
Bureau of Energy Conservation
949 Presidio Avenue, Room 111
San Francisco, CA 94115

Deborah Learner
Recreation and Park Department
McLaren Lodge
Golden Gate Park
Fell and Stanyan Streets
San Francisco, CA 94117

San Francisco Bureau of Engineering
Streets and Highways
45 Hyde Street, Room 212
San Francisco, CA 94102

Mr. Wallace Wortman
Director of Property
San Francisco Real Estate Department
450 McAllister Street, Room 600
San Francisco, CA 94102

Bill Witte, Director
Mayor's Economic Development Council
100 Larkin Street
San Francisco, CA 94102

Groups and Individuals

Ed Lee
Asian Law Caucus
36 Waverly Place
San Francisco, CA 94108

Bay Area Council
348 World Trade Center
San Francisco, Ca 94111

Alice Suet Yee Barkley
Bennett & Barkley
100 California Street, Suite 970
San Francisco, Ca 94111

Albert Beck
c/o Geography Department
California State University, Chico
Chico, CA 95926

Bendix Environmental Research, Inc.
1390 Market Street, Suite 902
San Francisco, CA 94102

Roger, Owen, Boyer & Associates
215 Leidesdorf Street
San Francisco, CA 94111

Dale Carlson
Engmann Options
369 Pine Street
San Francisco, Ca 94104

Kent E. Soule, Esq.
Chickering and Gregory
3 Embarcadero Center, 23rd Floor
San Francisco, Ca 94111

Alton Chinn
CNIRC
615 Grant Avenue
San Francisco, CA 94108

James A. Hogland
Cushman & Wakefield of California, Inc.
Bank of America Center
555 California Street, Suite 2700
San Francisco, CA 94104

Linda Griffin
DKS Associates
1419 Broadway, Suite 700
Oakland, CA 94612

Wayne E. Stiefvater, MAI
Cushman Wakefield
555 California, Suite 2700
San Francisco, CA 94104

Rita Dorst
RB International Services
9 Boston Ship Plaza
San Francisco, Ca 94111

Michael V. Dyett
Blayney-Dyett
70 Zoe Street
San Francisco, CA 94107

Cathy Brown, Librarian
Environmental Impact Planning
319 Eleventh Street
San Francisco, CA 94103

Barbara Brunal
Environmental Science Associates
1291 East Hillsdale Boulevard
Foster City, CA 94404

Dorice Murphy
Eureka Valley Trails and Art Network
175 Yukon Street
San Francisco, CA 94114

H. Grant Dehart, Executive Director
The Foundation for San Francisco's
Architectural Heritage
2007 Franklin Street
San Francisco, CA 94109

T. Brown
Munselle/Brown Partnership, Inc.
950 Battery
San Francisco, CA 94111

Sue Hestor
4536 - 20th Street
San Francisco, CA 94114

Carl Imparato
1205 Garfield
Albany, CA 94705

David Jones
241 Bartlett Street
San Francisco, CA 94110

Tom Jones
522 Shotwell
San Francisco, Ca 94110

Knight's Catering and Restaurant
363 Golden Gate Avenue
San Francisco, CA 94102

Sheryl Bratton
Jones Lang Wotton
One Embarcadero Center, Suite 710
San Francisco, CA 94111

Barry Livingston
Urban Center Development Limited
One Embarcadero Center, Suite 2216
San Francisco, CA 94111

Rich Farella
Merchandisers, Inc.
343 Golden Gate Avenue
San Francisco, CA 94102

NASA-Ames Research Center
333 Golden Gate Avenue
San Francisco, CA 94102

Susan Pearlstine
Pillsbury, Madison & Sutro
P. O. Box 7880
San Francisco, CA 94120

Gloria Root
Planning Analysis & Development
530 Chestnut
San Francisco, Ca 94133

Brad Paul
North of Market Planning Coalition
295 Eddy Street
San Francisco, CA 94102

Marcia Rosen
LCUA
625 Market Street, Suite 915
San Francisco, CA 94102

Bruce Raful
Rothschild Cappiello
332 Pine Street, Suite 511
San Francisco, CA 94104

Alan Raznick
237 Topaz Street
San Francisco, CA 94131

David P. Rhoades
One Maritime Plaza, Suite 1300
San Francisco, CA 94111

John F. Crowley
San Francisco Labor Council
510 Harrison Street
San Francisco, CA 94105-3104

Thomas W. Pulliam, Jr.
San Francisco Neighborhood
Legal Assistance Foundation
Litigation and Training Unit
49 Powell Street
San Francisco, CA 94102

Georgia Britten
San Franciscans for Reasonable Growth
870 Market Street, Room 1119
San Francisco, CA 95102

Michael Chow
Skidmore, Owings, and Merrill
1 Maritime Plaza
San Francisco, CA 94111

Square One Film and Video
725 Filbert Street
San Francisco, CA 94133

John Elberling
Tenants and Owners Development Corp.
230 Fourth Street
San Francisco, CA 94103

Timothy A. Tosta
785 Market Street, 14th Floor
San Francisco, Ca 94103

University of California
Night MBA Program
333 Golden Gate Avenue
San Francisco, Ca 94102

Calvin Welch
Council of Community Housing Organization
409 Clayton Street
San Francisco, CA 94117

Bill Gray
University of California, Berkeley
I.U.R.D.
316 Wurster Hall
Berkeley, CA 94720

Ken Friedman
529 Brookline Way
Mill Valley, CA 94941

Native American Heritage Commission
915 Capital Mall, Room 288
Sacramento, CA 95814

Gene Pollard
Morse/Diesel, Inc.
203 Willow St., Suite 202
San Francisco, CA 94109

Adjacent Property Owners

ARCO Building Co.
144 Brentwood Drive
South San Francisco, CA 94080

Aubert/Cabrol Property
c/o Pacific Realty Co.
110 Sutter Street
San Francisco, Ca 94104

Roland K. and Grace J. Perkins
2230 Union Street
San Francisco, CA 94123

Bank of America
Ivey/Smith/Woodward/Ackerman/Meyers Trust
Tax Department #3245
Box 37000
San Francisco, CA 94137

Robert J. Cardinal Family Trust
P. O. Box 768
San Francisco, CA 94101

Yellowfin Properties
1871 Market Street
San Francisco, CA 94103

Leland and Betty Barrett
6207 Geary Boulevard
San Francisco, Ca 94121

Larry Silva
David Gauger
Dividend Development Corporation
129 Hyde Street
San Francisco, CA 94102

Ai Su Ho
c/o Rudy Rapoport & Holden
235 Montgomery Street
San Francisco, CA 94104

Arthur and Sylvia Zanello
Gerald and Sylvia Dowd
1871 Market Street
San Francisco, CA 94103

American Broadcasting Company
277 Golden Gate Avenue
San Francisco, CA 94102

Ying/Shing/Hui
2363 Chestnut Street
San Francisco, CA 94123

Peter Bullock
1640 Valencia Street, #104
San Francisco, CA 94110

Media

Patrick Douglas, City Editor
San Francisco Bay Guardian
2700 Nineteenth Street
San Francisco, Ca 94110

Kirstin E. Downey
San Francisco Business Journal
635 Sacramento Street, Suite 310
San Francisco, CA 94111

Evelyn Hsu
San Francisco Chronicle
925 Mission Street
San Francisco, CA 94103

Gerald Adams
San Francisco Examiner
P. O. Box 7260
San Francisco, CA 94120

E. Cahill Maloney
San Francisco Progress
851 Howard Street
San Francisco, Ca 94103

The Sun Reporter
1366 Turk Street
San Francisco, CA 94115

Rob Waters
Tenderloin Times
146 Leavenworth Street
San Francisco, Ca 94102

Libraries

Cogswell College Library
600 Stockton Street
San Francisco, CA 94108

Faith Van Liere
Documents Library
City Library - Civic Center
San Francisco, Ca 94102

Jean Circiello
Environmental Protection Agency Library
215 Fremont Street
San Francisco, CA 94105

Government Documents Section
Stanford University
Stanford, CA 94305

Government Publications Department
San Francisco State University
1630 Holloway Avenue
San Francisco, Ca 94132

Hastings College of the Law - Library
198 McAllister Street
San Francisco, CA 94102

Institute of Governmental Studies
1209 Moses Hall
University of California
Berkeley, CA 94720

United States Government

U.S. Government
General Services Administration
Public Building Service, M/S -- 30A
525 Market Street
San Francisco, California 94105

XI. PREPARATION STAFF

The authors and consultants for this Draft EIR are listed below:

University of California
Hastings College of the Law
200 McAllister Street
San Francisco, California 94102

Dean Bert S. Prunty
Patricia A. Dolter, Project Manager
Nancy A. Aptekar, Assistant Legal Counsel

Ted Kreines, AICP
President Kreines & Kreines
Consultant
Tiburon, California

State of California
Department of General Services
Office of Facilities Planning and Development
1125 - 10th Street
Sacramento, California 95814

James R. Hargrove, Senior Environmental Planner
Roxane Dal Porto, Associate Planner

Skidmore, Owings & Merrill
San Francisco, California
Project Architects

Jefferson & Associates
San Francisco, California
Gordon Jacoby -- Air Quality, Transportation,
Traffic and Circulation

Donald Ballanti, Certified Consulting Meteorologist
El Cerrito, California
Wind Analysis

Environmental Impact Planning Corporation
San Francisco, California
Shadow Analysis

Sonoma State University
Kristina Roper -- Archaeological and Historical
Resources

XII. APPENDICES

APPENDICES

Table of Contents

	<u>Page</u>
A. Initial Study	A-3
B. Level of Service Interpretation	A-39
C. Downtown Plan Draft EIR Methodology	A-40
D. Fundamental Concepts of Environmental Noise	A-45
E. Air Quality San Francisco Air Pollutant Summary 1980-1984	A-50

APPENDIX A

INITIAL STUDY

Project Title: Golden Gate Building

Project Number: 85021912

Date: January 6, 1986

Prepared by:

University of California
Hastings College of the Law
200 McAllister Street
San Francisco, California 94102
Dean Bert S. Prunty
Patricia A. Dolter, Project Manager
Nancy A. Aptekar

State of California
Department of General Services
Office of Facilities Planning & Development
1125 - 10th Street
Sacramento, California 95814
James R. Hargrove, Senior Environmental Planner
Roxane Dal Porto, Associate Planner

Ted Kreines, AICP
President, Kreines & Kreines
Consultant
Tiburon, California

Assisted by:

Jefferson and Associates, San Francisco
Gordon Jacoby -- Air Quality, Traffic and
Circulation
R. A. Nunes Meteorological Services, Aptos
Robert Nunes -- Wind Study
Sonoma State University
Kristina Roper -- Archaeological and
Historical Resources
EIP, San Francisco -- Shadow Study

This statement is prepared in compliance with the California
Environmental Quality Act.

INITIAL STUDY
GOLDEN GATE BUILDING

University of California
Hastings College of the Law

PROJECT TITLE: Golden Gate Building

PROJECT LOCATION: Southeast corner of Golden Gate Avenue and Larkin Street in San Francisco Civic Center. USGS San Francisco north quadrangle map.

PROJECT NUMBER: State Clearinghouse Number 85021912

PROJECT DESCRIPTION: The University of California, Hastings College of the Law proposes to construct a 6-story, 80 foot building for educational and governmental use, including office space at the southeast corner of the intersection of Golden Gate Avenue and Larkin Street in San Francisco.

The project site is in the C-3-G (Downtown General Commercial) Use District. The height and bulk classification is 80-X, with a locally allowed height of 80-feet and no bulk limitations. The project site permits a FAR of 6:1 equivalent to 226,875 gross square feet of development for the 37,812 square foot site. As calculated under the San Francisco Downtown Plan, the proposed project would contain about 211,660 gross square feet of floor area. This would result in a Floor Area Ratio (FAR) of approximately 5.6:1 for the 37,812.5 square foot development site. The total office floor area gross, including educational offices, will be about 160,530 square feet.

On the ground floor level, the proposed project will contain educational, retail and restaurant space as well as a conference/meeting room. A porch located on the project's eastern perimeter will open on to an open space plaza to be built in conjunction with the proposed project. This plaza will connect with the sculpture garden adjacent to the College Library and will extend the full distance from Golden Gate Avenue to McAllister Street. The plaza area on the project site would comprise about 4,100 square feet. However, the entire plaza area including the garden currently existing adjacent to the College Law Library and the plaza extension to McAllister Street would be about 13,000 square feet. Additionally, the building will be set back about 12.5 feet from the southern lot line in order to provide an open space buffer separating the project from the residential units located on the site's southern perimeter. The project would include a 160-space parking facility located on two levels below grade.

PROJECT OBJECTIVES: It is the objective of the University of California, Hastings College of the Law to provide needed space for educational functions while at the same time utilizing College owned property situated in a prime location adjacent to the San Francisco Civic Center to further State and local governmental goals in consolidating various governmental agencies within the Civic Center area. Through leasing space in the proposed project to various governmental agencies, the College would be able to provide additional needed space for educational functions and derive revenues for the College.

SITE DESCRIPTION: The project site is 37,812.5 square feet and encompasses Lots 10, 11, 12, 13, 14 and 15 of Assessor's Block 347, bounded by Hyde, Golden Gate, Larkin and McAllister Streets. The project's site is within the C-3-G (Downtown-General-Commercial) Use District. Four structures ranging in height from one to three stories and a 176-space two level parking lot currently occupy the project site. Current on-site land uses include restaurant, retail and educational. All of the on-site structures and the parking lot would be demolished for the project.

ENVIRONMENTAL SETTING: The surrounding area supports a variety of land uses including office, institutional, retail and residential. The project site is adjacent to the core San Francisco Civic Center area. Current land use within this area is predominantly governmental and includes City, State and Federal office buildings. The project site also borders the Tenderloin district, a low-income neighborhood containing commercial activities and a supply of low cost housing units.

On February 20, 1985 a Notice of Preparation was sent to various State and local governmental agencies. The project as originally contemplated and described in this Notice of Preparation called for the construction of a 10-story, 130-foot structure. However, during the CEQA process the College decided to change the height of the proposed project to 80-feet. Therefore, both the Initial Study and the EIR analyze the effects associated with the 80-foot, 6-story project.

I. SUMMARY OF POTENTIAL ENVIRONMENTAL EFFECTS

A. PURPOSE OF THIS INITIAL STUDY

The proposed project is examined in this Initial Study in order to assist in the preparation of the EIR by:

- a- focusing the EIR on the effects determined to be potentially significant;
- b- identifying the effects determined not to be potentially significant; and
- c- explaining the reasons for determining that potentially significant effects would not be significant.

B. EFFECTS FOUND TO BE POTENTIALLY SIGNIFICANT

Some potential environmental effects have been determined to be potentially significant, and therefore require analysis in an EIR. They include: relationship between existing plans and policies and the proposed project; relationship between the proposed project to, and its effect on, land uses in the project's vicinity; visual quality and views affected by the proposed project; wind and shadow; archaeological and historical resources; transportation and traffic circulation; air quality; construction noise; energy, employment and housing factors; community concerns and possible growth-inducing effects.

C. EFFECTS FOUND NOT TO BE SIGNIFICANT

The following potential environmental impacts were determined to be insignificant, or would be reduced to an insignificant level through the use of mitigation measures included within the proposed project. These items require no further environmental analysis and will not be addressed in the EIR.

Excavation and Foundation: A complete geotechnical study will be prepared for the proposed project and the College will follow recommendations of the study.

Water: The proposed project would use about 6,600 gallons of water per day. Measures to mitigate potential impacts associated with excavation and dewatering would be included in the project.

Biology: The project site is completely covered by development. The project would not affect any plant or animal species or habitat.

Noise: Upon project completion, building operation would not result in noise levels greater than those presently existing in the area. Operational noise would be compatible with the San Francisco Noise Ordinance contained in the San Francisco Planning Code, section 2909, which limits mechanical equipment noise at the property line in a C-3-G zone to 70 dBA between 7:00 a.m. and 10:00 p.m.

Reflected Light/Glare: Although the project would create a new source of night lighting, prudent building design will lessen glare. Automatic timers will be installed which allow 12-hour operation and automatic turn-off. The project would use lighting designed to avoid glare and would not use reflective glass.

Hazards: An evacuation and emergency response plan would be developed as part of the proposed project, in consultation with the Mayor's Office of Emergency Services, to ensure coordination between the City's emergency planning activities and the project's plan. Prior to the demolition of the on-site structures, a study will be conducted to determine whether toxic materials such as asbestos are present. If toxics are found, demolition would occur only under strict control and after appropriate disposal sites are identified. To mitigate potential seismic and earthquake hazards, the project would be designed to resist lateral loads induced by ground shaking as provided in the current Uniform Building Code or other accepted design methods.

Public Services: The increased demand for public services attributable to the proposed project would not require additional personnel or equipment. The proposed project would be inspected by representatives of the State Fire Marshall and would not affect local building inspectors. The State Police would respond to all incidents that occur on the project site or involve State property and would make provisions to secure the building during and after operational hours.

Utilities: The proposed project would generate demand for about 6,600 gallons of water per day during the summer months and about 5,900 gallons per day during the winter months. The San Francisco Water Department would be able to meet project generated demands. The existing sewer mains are adequate to handle wastewater flows from the project. Pacific Bell would provide phone service to the project and anticipates no problem in meeting the demands of the proposed project.

Solid Waste: Upon completion of the proposed project it is estimated that approximately 0.7 tons of solid waste would be generated per day. Approximately one-third of this

amount would be recyclable white ledger paper. A recycling program will be implemented upon project completion.

Recreation: The project would increase daytime demand on parks and plaza areas within the site's vicinity. An open-space plaza will be built in conjunction with the project.

II. ENVIRONMENTAL EVALUATION CHECKLIST

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
A. <u>Earth.</u> Could the project cause:			
1. Unstable earth conditions or changes in geologic substructures?	_____	_____	<u>X</u>
2. Disruptions, displacements, compaction or overcovering of the soil?	<u>X</u>	_____	_____
3. Changes in topography or ground surface relief features?	<u>X</u>	_____	_____
4. Destruction, covering or modification of any unique geologic or physical features?	_____	_____	<u>X</u>
5. Any increase in wind or water erosion of soils either on or off the site?	_____	_____	<u>X</u>
6. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of an ocean or any bay, inlet or lake?	_____	_____	<u>X</u>
7. Exposure of people or property to major geologic hazards such as earthquakes, landslides, mudslides, ground failure or similar hazards?	_____	_____	<u>X</u>

Subsurface development would include excavation for subsurface parking, foundation preparation, and utility connections. There would be two levels of below grade parking with approximately 80 parking stalls on each level. Excavation would extend about 25 feet below grade. Existing basements extend 11.35 feet below grade. New excavation would extend about 13.65 feet beyond existing basements. Excavation would result in the removal of 19,116 cubic yards of earth that would be disposed of in appropriate locations.

There would be a slight elevation change to the site. The site now slopes about 6 feet from Golden Gate Avenue to the rear of the site. The proposed project would require the site to be level.

A preliminary soil investigation of the project site indicated that subsurface conditions are expected to consist of dune sands underlain by dense clayey sand or stiff sandy clay, with bedrock at about 150 to 200 feet below surface. /1/ The presence of loose to medium dense dune sand would influence selection of a suitable foundation. During a strong earthquake, sand tends to densify (or liquify) and could settle irregularly. A suitable foundation could consist of either driven, precast, prestressed concrete piles with the basement slab supported on grade or a mat or rigid grid foundation. Unless soil borings reveal dense soil at foundation subgrade level, isolated spread footing foundations would be inappropriate, as this foundation type would be susceptible to abrupt differential settlement. Drilled, cast-in-place concrete piers are a possible foundation type; however, they would probably require dewatering and casing to prevent caving of the sandy soil. Mitigations for dewatering are in Section 3, of this Initial Study.

Where basement or foundation excavations extend below the basement levels of adjacent buildings and those structures are not pile supported, underpinning will be required. Shoring will be required to laterally retain the loose sands under adjacent basement floors, sidewalks, and street areas. If driven piles are used, vibrations induced by pile driving may cause densification of existing loose fill materials. Structures and streets supported on this fill could settle. Vibrations, and hence settlement, could be reduced by pre-drilling pile locations. Settlement of adjacent structures and streets would be monitored during construction. A preconstruction survey of the conditions of nearby buildings will be the basis for determining whether the potential for damage exists during construction and will identify the necessary mitigation measures.

Potential excavation and foundation impacts will not be addressed in the EIR because a complete geotechnical study will be prepared for the project; the project sponsor will follow recommendations of the study, bringing potential impacts to an acceptable level.

Groundshaking is expected to be strong on the site during a major earthquake on the San Andreas, Hayward, or Calaveras faults. /2/ The San Andreas Fault, about seven miles southwest of the project, presents the greatest earthquake threat. During the 1906 earthquake along the San Andreas Fault, strong groundshaking was documented near the site. The recurrence interval for an earthquake on the San Andreas

Fault with a magnitude of 8.3 ranges from 100 to 1,000 years. /3/ The project site is not in a special Geologic Study Area as designated in the Community Safety Element of the San Francisco Comprehensive Plan. /4/

Potential earthquake related impacts include liquefaction and densification. Flooding by tsumamis and seiches is not a potential hazard since the predicted 100-year and 500-year inundation levels would not reach the elevation of the site. To mitigate potential seismic hazards, the project would be designed to resist lateral loads induced by ground shaking, as provided in the current Uniform Building Code or other accepted design methods. The project would replace buildings on the site built prior to current seismic code standards, and therefore generally more susceptible to earthquake damage. An evacuation and emergency response plan would be developed by the project sponsor or building management staff, in consultation with the Mayor's Office of Emergency Services, to ensure coordination between San Francisco's emergency planning activities and the project's plan and to provide for building occupants in the event of an emergency. Potential earthquake related impacts will not be discussed in the EIR due to the above mitigation measures.

Yes Maybe No

B. Air Quality. Could the project cause?

- | | | | |
|---|-----|------------------|------------------|
| 1. Substantial air emissions or deterioration of ambient air quality? | ___ | ___ <u>X</u> ___ | ___ |
| 2. Creation of objectionable odors? | ___ | ___ | ___ <u>X</u> ___ |
| 3. Alteration of air movement, moisture, temperature or any change in climate, either locally or regionally | ___ | ___ <u>X</u> ___ | ___ |

AIR QUALITY

Construction activities would generate pollutants in the project vicinity. Construction trucks and equipment would emit carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NOx), sulfur dioxides (SOx) and particulates (TSP). These emissions would temporarily increase local pollutant concentrations, but would not be likely to cause violations of air quality standards. Demolition and earth moving would generate dust (TSP). The project sponsor would require the contractor to take measures to reduce dust generation. Specifically, the contractor would water demolition and construction areas twice daily, suppressing dust emissions by about 50%.

After construction, project-generated traffic would result in additional air quality impacts. Calculations indicate that project-related traffic could generate the following emissions in 1990:

CO --	0.21 tons per day
HC --	0.02 tons per day
NOx --	0.01 tons per day

Project-related traffic would account for about 0.4% of the anticipated 1990 CO emissions generated in the C-3 Downtown Plan area and would account for approximately 0.2-0.4% of the total daily emission of hydrocarbons and nitrogen oxides.

Even with the proposed project and other new development, total CO, HC, and NOx emissions in the C-3 district of San Francisco would be less in 1990 and 2000 than in 1984 because new vehicles have improved emission controls. These controls would more than offset the increased number of emission sources from new development.

Similarly, CO concentrations at selected intersections near the proposed project are anticipated to be less in 1990 and 2000 than in 1984. The projected CO concentrations would not violate either the one-hour or the eight-hour standard.

The proposed project would not conflict with the 1982 Bay Area Air Quality Plan strategies to reduce pollution.

Air quality impacts from the project as well as cumulative development traffic in the project area will be discussed in the EIR.

WIND

Existing buildings in the project area may shield much of the lower portion of the proposed project from wind. As a result, the project would have a reduced potential for creating adverse wind effects. The State Building at 455 Golden Gate Avenue will shield the windward west side of the project, reducing the probability of significant down draft. Wind turbulence from the 20-story Federal Building at 450 Golden Gate Avenue will be more dominant than wind effects from the proposed project. The project may create a minor increase in wind at the corner of Larkin Street and Golden Gate Avenue. During windy periods, wind flowing around the southwest corner of the building may cause localized wind discomfort on the Larkin Street sidewalk outside the entrance to the below grade parking lot. The Civic Center Plaza and the Federal Building Plaza are upwind of the project site and would not be affected by the proposed project.

A complete wind tunnel analysis by a certified consulting meteorologist will be prepared for the EIR. The findings of this analysis will be discussed within the EIR.

SHADOW

Existing structures on the project site range from one to three stories in height. These structures cast shadows on Golden Gate Avenue and adjacent sidewalks. The project would increase shadows on sidewalks and structures near the site during the fall, winter and spring months. These effects will be discussed in the EIR and the analysis will include shadow diagrams.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
C. <u>Water.</u> Could the project cause?			
1. Changes in the currents, or the course or direction of water movements, in either marine or fresh waters?	___	___	<u>X</u>
2. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	___	<u>X</u>	___
3. Alterations to the course or flow of flood waters?	___	___	<u>X</u>
4. Change in the amount of surface water in any water body?	___	___	<u>X</u>
5. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?	___	___	<u>X</u>
6. Alteration of the direction or rate of flow of ground waters?	___	<u>X</u>	___
7. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	___	<u>X</u>	___
8. Substantial reduction in the amount of water otherwise available for public water supplies?	___	___	<u>X</u>
9. Exposure of people or property to water related hazards such as flooding or tidal waves?	___	___	<u>X</u>

There is no surface water at the project site. The site is now impervious, covered by structures and an asphalt parking lot. Runoff currently drains into the combined City storm

and sewer system. This drainage would continue. The distribution of runoff could be altered. Because rain usually falls at an angle, runoff that would have fallen in an area beyond the project site would be blocked by the project and fall on the project site. As a result, the building will probably be responsible for a higher degree of on-site runoff, while areas blocked by the building may receive less runoff. This would not be a significant effect because drainage into the city storm and sewer system would continue and the storm drains have the capacity to handle the flow. In addition, the time of peak runoff concentration from the project could be slower than presently occurs due to the greater roof area of the proposed building. The present roof area of the existing four on-site structures is approximately 16,000 square feet, while the roof area of the project will be approximately twice this amount. Rainfall drains slower from a roof than it does from the ground. Therefore, even if the proposed project would result in greater runoff on site, this runoff would drain more slowly into the storm drains. This issue will not be discussed in the EIR.

Groundwater is found at approximately 20 feet in this area. /5/ Since the proposed project would include subterranean development, dewatering may be necessary. If drilled, cast-in-place concrete piers are used for foundations, dewatering probably would be necessary. /6/ Dewatering may affect groundwater flows and water quality and also could contribute to ground subsidence near the site. Should dewatering be necessary, the project would include the following mitigation measures:

- The level of the water table and potential settlement and subsidence would be monitored by the general contractor. A lateral and settlement survey would be conducted to monitor any movement or settlement of surrounding buildings and adjacent streets during the dewatering process. Control lines and benchmarks would be established for monitoring horizontal and vertical movement.

- If unacceptable subsidence were to occur during construction, groundwater recharge would be used to halt the settlement.

- Groundwater pumped from the site would be retained in a holding tank to allow suspended particles to settle, if necessary, to prevent sediment from entering the storm drain/sewer lines.

These mitigation measures would reduce potential impacts to an insignificant level; therefore, this issue will not be discussed in the EIR.

Drinking water for San Francisco is imported, primarily from Hetch Hetchy Reservoir in the Sierra Nevada. The San Francisco Water Department owns and operates the water delivery system. This department has indicated it has sufficient water to provide the required 6,600 gpd (summer months) required for the project and also has indicated that the existing 16-inch main on the east side of Larkin Street and the 6-inch main on the north side of Golden Gate Avenue will be adequate to serve the project. /7/ This issue will not be discussed in the EIR.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
D. <u>Plant Life.</u> Could the project cause?			
1. A change in the diversity of species, or the numbers of any species of plants?	___	___	<u>X</u>
2. A reduction of the numbers of any unique, rare or endangered species of plants?	___	___	<u>X</u>
3. The introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?	___	___	<u>X</u>
4. A reduction in acreage of any agricultural crop?	___	___	<u>X</u>

The project site is completely covered by development. The project would not affect any plant species or habitat. This issue will not be discussed in the EIR.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
E. <u>Animal Life.</u> Could the project cause?			
1. A change in the diversity of species, or numbers of any species of animals?	_____	_____	<u>X</u>
2. A reduction of the numbers of any unique, rare or endangered species of animals?	_____	_____	<u>X</u>
3. Introduction of new species of animals into an area or result in a barrier to the migration or movement of animals?	_____	_____	<u>X</u>
4. Deterioration to existing fish or wildlife habitat?	_____	_____	<u>X</u>

The project site is completely covered by development. The project would not affect any animal species or habitat. This issue will not be discussed in the EIR.

F. <u>Noise.</u> Could the project cause?			
1. Increases in existing noise levels?	_____	<u>X</u>	_____
2. Exposure of people to severe noise levels?	_____	<u>X</u>	_____

PROJECT CONSTRUCTION

During the demolition, excavation and construction periods, increased noise levels can be expected in the surrounding area. Construction noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and listener, and presence of barriers between the noise source and listener. The noise levels of construction equipment other than impact will not exceed 80 dBA at 100 feet. Impact tools must have both intake and exhaust muffled. Additionally, the general contractor would construct barriers around the site and stationary equipment such as compressors to reduce construction noise by as much as 5 dBA. The general contractor would, to the extent possible, locate stationary equipment in pit areas or excavated areas to serve as noise barriers. Construction activities would be limited to the hours between 7:00 a.m. and 8:00 p.m. to reduce disturbance

to nearby sensitive receptors. Construction noise will be addressed in the EIR.

PROJECT OPERATION

The noise environment of the site is dominated by vehicular traffic which is typical of downtown San Francisco and the Civic Center area. According to the Downtown Plan EIR, the area has a wide range of traffic noise levels ranging from 65 to 75 dBA.

The Environmental Protection Element of the San Francisco Comprehensive Plan indicates a day/night average noise level (Ldn) of 70 dBA on Golden Gate Avenue and an Ldn of 65 dBA on Larkin Street adjacent to the site in 1974. /8/ The Environmental Protection Element contains guidelines for determining the compatibility of various land uses with different noise environments. For office uses, the guidelines recommend no special noise control measures in an exterior noise environment up to an Ldn of 70 dBA. Since the noise levels do not exceed the recommended guideline level for an office building, special noise insulation would not be necessary in the building design and further analysis of this topic is not required in the EIR.

Project operation would not result in noise levels greater than those presently existing in the area. The amount of traffic generated by the project during any hour of the day and cumulative traffic increases at the time of project completion would cause traffic noise levels to increase by less than 1 dBA. To produce a noticeable increase in environmental noise, a doubling of existing traffic volume would be required. Traffic increases of this magnitude would not occur with anticipated incremental development. /9/

During lulls in traffic, mechanical equipment generating 70 dBA could dominate the noise environment at the site. The building will include design features limiting mechanical equipment noise levels to 60 dBA. The noise levels would not be perceptible within the sound level context of the project. This noise level is compatible with the San Francisco Noise Ordinance, "Fixed Source Noise Levels," which limits mechanical equipment noise at the property line in a C-3-G zone to 70 dBA between 7:00 a.m. and 10:00 p.m. and 60 dBA between 10:00 p.m. and 7:00 a.m. Therefore, a discussion of operational noise will not be included within the EIR.

		Yes	Maybe	No
G.	<u>Light and Glare.</u> Could the project cause?			

1. New light or glare? X

The project will create a new source of night lighting. Although the night lighting will not affect nearby similar land uses, the potential exists for impact on nearby residential structures. Prudent building design will lessen glare. Mitigation measures would include automatic timers which allow 12-hour operation and automatic turn-off. In addition, the building would include manual overrides for evening janitorial staff. Finally, the building would use lighting designed to avoid glare and would not use reflective glass. The plaza would have non-glare lighting with minimal foot candles for foot traffic and safety. Impacts associated with light and glare will not be discussed in the EIR because the above mentioned mitigation measures will reduce the impacts to an insignificant level.

		<u>Yes</u>	<u>Maybe</u>	<u>No</u>
H.	<u>Land Use.</u> Could the project cause?			

1. A substantial alteration of the present or planned land use in the area? X

Four structures currently used for restaurant, retail and educational purposes and a two-level parking lot currently occupy the project site. The proposed project would result in demolition of all of the structures as well as the parking lot and would change the site's land use to educational and governmental, including office space. Restaurant and retail use as well as a parking lot will also be included within the proposed project. This change in land use, in turn, has the potential to alter future land uses within a block or two of the project because the increase in number of on-site employees would create additional demand for retail services, restaurants, etc.

The project site lies adjacent to the core San Francisco Civic Center area. Current land use within this area is predominantly governmental and includes City, State and Federal office buildings. The project site also borders the Tenderloin district, a low-income neighborhood containing commercial activities and a supply of low cost housing units. As a result of the site's location, it is surrounded by a variety of land uses.

The project site is zoned C-3-G, Downtown General Commercial. The C-3-G district is composed of a variety of

land uses including office, institutional, retail and residential. Land directly opposite Lots 10 and 11 on Golden Gate Avenue as well as the residential property bordering the site's southern perimeter was recently rezoned from C-3-G to North of Market Residential Special Use District. However, the project site zoning classification remains C-3-G. The height and bulk classification is 80-X permitting a locally allowed height of 80 feet with no bulk limitations.

The EIR will include a discussion of land use.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
I. <u>Natural Resources.</u> Could the project cause?			
1. An increase in the rate of use of any natural resources?	___	<u>X</u>	___
2. Substantial depletion of any non-renewable natural resource?	___	___	<u>X</u>

The proposed project will result in the use of energy and building materials. See this Initial Study, Energy for a discussion of this issue.

J. <u>Risk of Upset.</u> Could the project cause?			
1. Risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?	___	<u>X</u>	___
2. Interference with emergency response plans or emergency evacuation plans?	___	___	<u>X</u>

The project would not increase daytime population in San Francisco because employees of the project will be relocating to the project site from other locations within San Francisco. Thus, employees should not contribute to congestion in the event an emergency evacuation of the City were required. An evacuation and emergency response plan would be developed as part of the proposed project, in consultation with the Mayor's Office of Emergency Services, to ensure coordination between the City's emergency planning activities and the project's plan and to provide for building occupants in the event of an emergency. This mitigation measure will reduce any impacts to an

insignificant level and this issue will not be discussed in the EIR.

The four structures that would be demolished are older, built between the years of 1906 and 1948, and may contain toxic materials such as asbestos in their insulation. Before demolition, a study will be done to determine whether these toxic materials are present. If such materials are found, there is a potential that the materials may be released during demolition. If toxics are found, all possible precautions will be taken to avoid human health hazards. Demolition would occur only under strict control and after appropriate disposal sites are identified. This mitigation measure will reduce potential impacts to an insignificant level. Therefore, this issue will not be addressed in the EIR.

Yes Maybe No

K. Population. Could the project cause?

1. An alteration in the location, distribution, density, or growth rate of the human population of an area?

 X

The proposed project would increase the daytime density of the site by consolidating into one building various governmental agencies now dispersed at various locations throughout San Francisco. Because the proposed project will contain approximately 144,000 net square feet of rentable office space, calculations indicate that approximately 960 employees will be working within the project site.

This issue will be analyzed in the EIR.

L. Housing. Could the project cause?

1. An affect on existing housing or create a demand for additional housing?

 X

The proposed project involves moving workers from one location to another within San Francisco. These workers are not expected to create a demand for additional housing because it is anticipated that they will continue residing in their present locations.

The proposed project will result in the demolition of four structures, two of which in the past served as housing units. These issues will be discussed in the EIR.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
N. <u>Transportation/Circulation.</u> Could the project cause?			
1. Generation of substantial additional vehicular movement?	_____	<u> X </u>	_____
2. Effects on existing parking facilities, or demand for new parking?	<u> X </u>	_____	_____
3. A substantial impact upon existing transportation systems?	_____	_____	<u> X </u>
4. Alterations to present patterns of circulation or movement of people and/or goods?	<u> X </u>	_____	_____
5. Alterations to waterborne, rail or air traffic?	_____	_____	<u> X </u>
6. An increase in traffic hazards to motor vehicles, bicyclists or pedestrians?	_____	<u> X </u>	_____

The increase in the number of employees at the project site would increase demand on existing transportation systems. Although the effects of the project itself on existing transportation systems are not expected to be substantial, the cumulative effects of office development has the potential for impact on transportation systems. Project related and cumulative transportation, parking and circulation impacts will be discussed in the EIR.

Transportation impacts which may result from truck movements to and from the project site during the periods of demolition, excavation and construction will also be described in the EIR.

Yes Maybe No

N. Public Services. Could the project have an effect upon, or result in a need for new or altered governmental services in any of the following areas?

- | | | | |
|---|-------|--------------|--------------|
| 1. Fire protection? | _____ | <u> X </u> | _____ |
| 2. Police protection? | _____ | <u> X </u> | _____ |
| 3. Schools? | _____ | _____ | <u> X </u> |
| 4. Parks and other recreational facilities? | _____ | <u> X </u> | _____ |
| 5. Maintenance of public facilities including roads? | _____ | <u> X </u> | _____ |
| 6. Other governmental services? | _____ | _____ | <u> X </u> |

FIRE

The Downtown Plan EIR projected a small increase in fire incidents in comparison to the increase in non-fire incidents between 1982 and 1984. This small increase was due largely to the fire resistive construction of new buildings. Older buildings, typically constructed of wood and masonry, have had a greater fire demand for Fire Department services than have the newer (and generally larger) steel reinforced concrete buildings that have replaced them.

The proposed project would replace four older structures with a new, steel reinforced concrete building. In addition, the project would comply with Titles 24 and 25 of the California Administrative Code that require all new buildings over 75 feet in height to have sprinkler systems and smoke detection systems throughout. While the project is not required to comply with Life Safety Provisions of the San Francisco Building Code, the project will incorporate emergency response systems stipulated by the Code such as fire alarms, an emergency communication system, an emergency power supply and an emergency water supply.

The proposed project would contribute to the cumulative demand for fire protection services in the C-3 District. By increasing the density of population on the project site, the project has the potential to cause an increase in non-fire incidents such as first-aid calls, resuscitations and false alarms. The Downtown Plan EIR has analyzed impacts

anticipated from cumulative downtown development and has identified no significant effects. The Fire Protection setting and impacts discussion in the Downtown Plan EIR (Vol. 1, pp. IV F.6-8; Vol. 2, pp. K.10-13; Vol. 3 pp. F.1-7) is summated below and incorporated herein by reference.

As estimated 7,600 (21%) of the City's 36,000 annual fire and non-fire incidents occur in the C-3 District. The number of annual incidents in the C-3 District is expected to increase to approximately 7,800 by the year 2000. The majority of this increase in yearly incidents would be non-fire incidents (e.g., first aid calls, false alarms, etc.). The increase in fire incidents from 1984 to 2000 would be less than 1% due to the effectiveness of the San Francisco and State Life Safety Code provisions.

Based upon these projections, all Fire Department task units would continue to operate within their annual service limits through the year 2000. The Fire Department anticipates that no new equipment or specialized staff would be needed to meet the demands identified. Two additional building inspectors would be required to maintain annual inspection of all downtown high-rise structures. The proposed project, however, would be inspected by representatives of the State Fire Marshall and would not affect local building inspectors. The issue will not be discussed in the EIR.

POLICE

The Tenderloin area is a high crime area. Most criminal incidents involve non-aggravated assault, disorderly conduct, drunkenness, malicious mischief and prostitution. /10/ Thefts, burglaries and assaults occur frequently. The project site lies within the San Francisco Police Department's Northern District. The average response time in this district is 4.33 minutes for a high priority call and 6.00 minutes for a low priority call.

The State Police would respond to all incidents that occur on the project property or involve State property and would make provisions to secure the building during and after operational hours. The State Police keep one officer on foot patrol and patrol cars within the San Francisco Civic Center area.

By increasing population on the site, the proposed project would contribute to the cumulative demand for local police services. The Downtown Plan EIR has analyzed effects anticipated from downtown development and has identified no significant effects. The police service setting and impact discussion in the Downtown Plan EIR (Vol. 1, pp. IV.F.2-6 and 11-15; Vol. 2, pp. K.2-9, Vol. 3, pp. F.1-7) is summated below and incorporated herein by reference.

An estimated 19% (23,000) of the City's 123,000 annually reported criminal incidents occur in the C-3 District. The number of annual criminal incidents in this district is expected to increase to approximately 24,500 by the year 2000. Based upon projections of new criminal incidents in the C-3 District, an increased demand for approximately 26 Police Department personnel is anticipated through the year 2000. This represents approximately 1% of the existing police force. The Police Department currently has no plans for any future major capital expenditures (such as a new police station) nor would any be needed to meet the demands identified. This issue will not be discussed in the EIR.

SCHOOLS

Because governmental and educational workers employed within the proposed project would be relocating to the site from other locations within San Francisco, the proposed project would not contribute to an increase in the cumulative demand for school services. The Downtown Plan EIR analyzed the effects anticipated from cumulative development and identified no significant effect on school services. This issue will not be discussed within the EIR.

RECREATIONAL FACILITIES

The proposed project would increase daytime demand on parks and plazas within the site's vicinity. There is a potential that the Federal Building Plaza would be affected, along with other parks and open space near the project site. The proposed project, however, would include an open space plaza, thereby reducing potential impacts on other open spaces areas within the site's vicinity. This issue will not be discussed within the EIR.

MAINTENANCE OF ROADS

The proposed project would increase the use of streets in the vicinity. During construction, the project would generate truck traffic. During operation, the project would generate primarily light vehicular traffic, although some delivery trucks would enter and exit the site. This issue will not be discussed within the EIR.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
0. <u>Energy.</u> Could the project cause?			
1. Use of substantial amounts of fuel or energy?	_____	<u> X </u>	_____
2. Substantial increase in demand on existing sources of energy or require the development of new energy sources?	_____	<u> X </u>	_____

Demolition of existing structures, excavation and removal and transport of excavated materials would require an unknown amount of energy. Project construction, including fabrication and transportation of building materials, worker transportation, site development and building construction would require approximately 380 billion BTU of energy in the form of gasoline, electricity, natural gas and diesel fuel.
/11/

Project operation would require electricity and natural gas. At this stage in the design of the proposed project, there is insufficient information upon which to base a building energy budget analysis. The proposed project will either meet or exceed standards in Title 24 of the California Administrative Code. Title 24 establishes energy conservation standards for the design and construction of office buildings. /12/ Requirements of the standard will be satisfied through the component performance standards method, requiring incorporation of a set of specific design features, through the use of nondepletable energy resources, or through the energy budget method, demonstrating that the building would consume no more than a specified quantity of energy. Wherever appropriate and economically feasible, the building will incorporate energy conserving design features.

The EIR will analyze energy impacts.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
P. <u>Utilities.</u> Could the project result in a need for new system, or substantial alterations to the following utilities?			
1. Power or natural gas?	<u>X</u>	<u> </u>	<u> </u>
2. Communication system?	<u>X</u>	<u> </u>	<u> </u>
3. Water?	<u>X</u>	<u> </u>	<u> </u>
4. Sewer or septic tanks?	<u>X</u>	<u> </u>	<u> </u>
5. Storm water drainage?	<u> </u>	<u>X</u>	<u> </u>
6. Solid waste and disposal?	<u>X</u>	<u> </u>	<u> </u>

The proposed project would contribute to the cumulative demand for community services. Impacts anticipated from cumulative downtown development have been analyzed in the Downtown Plan EIR and no significant impacts have been identified. The community service setting and impacts discussion in the Downtown Plan EIR (Vol. 1, pp. VI.F.1-21; Vol. 2, pp. A.6-7 and K.1-13; Vol. 3, pp. F.1-7) is summarized below and incorporated herein by reference.

WATER

The proposed project would generate demand for approximately 6,600 gallons of water per day during the summer and 5,900 gpd during the winter. The existing 16-inch main on Larkin Street or the existing 6-inch main on Golden Gate Avenue would serve the project. The San Francisco Water Department would be able to meet project generated demand. /13/ This issue will not be addressed in the EIR.

SEWER

The project would generate about 6,600 gallons per day of dry weather wastewater flows. The existing sewer mains are adequate to handle the flow. /14/ A new sewer system is currently being built pursuant to the City's Clean Water Program. The system is intended to handle combined volumes of sewage and rainwater runoff. Since the capacity of the system is designed to handle rainwater flows (which can be 50 times the volume of regular sewage) additional development in the C-3 district would not affect operation of the sewage system. This issue will not be discussed in the EIR.

POWER

Gas and electricity would be provided by Pacific Gas and Electric Company (PG&E). Depending upon demand of the project, it may be necessary for PG&E to install new connection facilities. /15/ An analysis of project energy consumption will be included in the EIR.

COMMUNICATIONS

Pacific Bell would provide phone service to the site and anticipates no problem in meeting the demand of the project. /16/ This issue will not be discussed in the EIR.

STORM WATER DRAINAGE

Runoff now drains into the combined city storm and sewer system. This drainage would continue. However, the distribution of runoff could be altered. Rain usually falls at an angle and runoff that would have fallen in an area beyond the project site would be blocked by the building and fall on the project site. As a result, the building will probably be responsible for a higher degree of on-site runoff, while areas blocked by the building may receive less runoff. This would not be a significant effect because drainage into the city storm and sewer system would continue and the storm drains have the capacity to handle the flow. This topic will not be included in the EIR.

SOLID WASTE

The C-3 district produced about 78,000 tons of solid waste in 1984, equal to about 13% of the City's total non-recyclable solid waste. Until November 1, 1988, the City's solid waste will be disposed of at the Altamont Hills Landfill in Alameda County. Waste from the C-3 district is collected weekly on regular routes established by the Golden Gate Disposal Company under contract to the City and County of San Francisco. From collection points the waste is trucked to a transfer station in Brisbane, where the waste is transferred to larger trucks and hauled about 55 miles to the Altamont Hills landfill.

Pursuant to the San Francisco County Solid Waste Management Plan, the City is currently searching for additional landfill capacity to accomodate the City's solid waste generated in the years after 1988. The Solid Waste Management Plan also emphasizes the construction of a Resource Recovery Facility which would reduce the need for future landfill capacity, encourage recycling and produce electricity which could be sold.

By the year 2000, the C-3 district is expected to produce about 45,000 tons of solid waste. The generate shift in land use from industrial to office which is anticipated in this district would in turn cause a shift in solid waste composition, resulting in more paper and less metal, wood crating and other industrial materials.

Upon completion of the proposed project it is estimated that approximately 0.7 tons of solid waste per day would be generated. Approximately 1/3 of this amount would be recyclable white ledger paper. To mitigate impacts associated with the generation of solid waste, a recycling program will be implemented upon project completion. This issue will not be discussed within the EIR.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
Q. <u>Human Health.</u> Could the project cause?			
1. Creation of any health hazards or potential health hazards?	_____	<u>X</u>	_____
2. Exposure of people to potential health hazards?	_____	<u>X</u>	_____

The four buildings to be demolished for the proposed project may contain toxic materials such as asbestos in their insulation. See this Initial Study, Risk of Upset for a discussion of this potential impact and corresponding mitigation measures.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
R. <u>Aesthetics.</u> Could the project result in?			
1. Obstruction of any scenic vista or view open to the public or will the proposal result in the creation of an aesthetically offensive site open to the public view?	_____	_____	<u>X</u>

The proposed project will alter views from nearby streets and buildings. From nearby street level locations on Golden Gate Avenue and Larkin Street, views of the project would include the full height of the building. Views from surrounding streets, including Hyde and McAllister Streets, would include portions of the proposed project. From these streets, the view of the project would blend with the existing State and Federal buildings and with the six-story Hastings Law Library.

An essential issue is whether the proposed project will integrate with the surrounding structures, creating a sense of transition from the core Civic Center area to the Tenderloin area. The Civic Center government buildings are primarily monumental structures dating to the the 1910s and 1920s, while structures in the Tenderloin are primarily low-rise structures constructed prior to 1945. To avoid an adverse effect, the design of the project will incorporate materials complementary to those used in surrounding buildings. This issue will be included within the EIR.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
S. <u>Recreation.</u> Could the project cause?			
1. An impact upon the quality or quantity of existing recreational opportunities?	_____	_____X_____	_____

The proposed project would increase daytime demand on parks and plazas within the site's vicinity. There is a potential that the Federal Building plaza and other parks near the site will be affected. Any potential impacts would be reduced because an open space plaza will be incorporated into the project's design. This issue will not be discussed within the EIR.

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
T. <u>Cultural Resources.</u> Could the project cause?			
1. Any alteration or destruction of a prehistoric or historic archaeological site?	_____	<u> X </u>	_____
2. Adverse physical or aesthetic effects to a prehistoric or historic building, structure or object?	_____	_____	<u> X </u>
3. A physical change which would affect unique ethnic cultural values?	_____	_____	<u> X </u>
4. A restriction in existing religious or sacred uses within the potential impact area?	_____	_____	<u> X </u>

A preliminary cultural records search revealed that the project site is approximately 1,000 feet from the "oldest dated human remains from San Francisco" and indicated that the probability of finding historic and prehistoric cultural resources within the project area is high. /17/ As a result, further archival research was undertaken. This research suggested that archaeological deposits dating to the early American occupation and preceding prehistoric and Spanish-Mexican periods may be present within the project area. The research contained the recommendation that additional archival research be performed both to identify specific households that occupied the project area prior to 1906 and to provide information necessary to accurately position test trenches. These recommendations will be followed. In addition, an archaeologist will meet with soils engineers prior to taking soil samples in order to communicate to the engineers information which may be of use in assessing the integrity of potential archaeological deposits. Based upon the results of the soils sample, the construction contracts will specify measures necessary to preserve artifacts. Archaeological impacts will be discussed in the EIR.

All of the on-site structures are rated "D" by the Foundation for San Francisco's Architectural Heritage with the exception of the structure located at 361-365 Golden Gate Avenue which is rated "C." /18/ Buildings rated "D" are recognized to be of minor or no importance while buildings rated "C" are recognized to be of contextual importance. None of the on-site structures are on the

City's List of Architecturally Significant Buildings. In the fall of 1984, the State Office of Historic Preservation declined to nominate any of the buildings to the Department of Interior for inclusion on the National Register of Historic Places. /19/

This issue will be discussed within the EIR.

III. COMPATIBILITY WITH EXISTING PLANS

An examination of whether the project would be consistent with existing zoning, plans and other appropriate land use controls will be included with the EIR.

IV. CAMPUS/COMMUNITY CONTROVERSY

The College is aware of controversy concerning the proposed project and the EIR will contain a discussion of this issue.

V. ALTERNATIVES TO THE PROPOSED PROJECT

A. No-Project: This alternative would entail no change to the project site as it currently exists. All four buildings now occupying the site would remain, presumably in current condition and use. The parking lot would also remain. The College would not acquire needed educational space and governmental agencies would continue to be dispersed at various locations throughout San Francisco.

B. Ten Story Structure: A 10-story, 130-foot building would contain space for educational and governmental use, including offices. A meeting/conference room, restaurant and open space plaza would be included in the project.

C. Ten Story Structure with Roof Terraces on the 9th and 10th Floors: This alternative would consist of a 10-story, 130-foot building with space for educational and governmental use, including offices. A meeting/conference room, restaurant and open space plaza would be included in the project. The proposed structure would be shaped at the top to include roof terraces.

D. Six Story Structure with No Plaza: This alternative would be 80-feet in height but would not include an open space plaza.

Alternatives will be discussed within the EIR.

VI. MANDATORY FINDINGS OF SIGNIFICANCE

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate or plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or pre-history?	___	___	___X
2. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	___	___	___X
3. Does the project have possible environmental effects which are individually limited, but cumulatively considerable?	___	___X	___
4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	___	___	___X
5. Is there a serious public controversy concerning the possible environmental effects of the project?	___	___	___X

VII. DETERMINATION

On the basis of this Initial Study:

_____ I find the proposed project COULD NOT have a significant on the environment and a NEGATIVE DECLARATION will be prepared.

_____ I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because the mitigation measures described in this Initial Study have been included as part of the proposed project. A NEGATIVE DECLARATION will be prepared.

✓
_____ I find that the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.

UNIVERSITY OF CALIFORNIA,
HASTINGS COLLEGE OF THE LAW

Date:

1/6/84

By:

Bert S. Prunty
Dean Bert S. Prunty

Notes, Initial Study

- /1/ Harding Lawson Associates for Milton Meyer & Company, Preliminary Soil Investigation, State of California Office Building San Francisco, California, November 29, 1984.
- /2/ Ibid.
- /3/ Ibid.
- /4/ City and County of San Francisco, The Comprehensive Plan, Community Safety Element, 1974.
- /5/ Op. Cit., November 29, 1984.
- /6/ Ibid.
- /7/ Mr. Swaim, San Francisco Water Department, telephone conversation, July 2, 1985.
- /8/ City and County of San Francisco, The Comprehensive Plan, Environmental Protection Element, 1974.
- /9/ See Downtown Plan EIR Section IV.E. generally and Section IV.J., 8-18. Increases of 1 dBA or less in environmental noise are not noticeable by most people outside a laboratory situation (National Academy of Sciences, Highway Research Board, Rsch. Rpt. No. 117 (1971)). (See FHWA Highway Traffic Noise Prediction Model, Rpt. #FHWA-RD-77-108, December 1978, p. 8, regarding doubling of traffic volumes producing increases of 3 dBA or more which are noticed by most people.)
- /10/ City and County of San Francisco, Downtown Plan EIR, Vol. 1, p. IV.F.5.
- /11/ Hannon, B. et. al., 1978, "Energy and Labor in the Construction Sector," Science 202: pp. 837-847.
- /12/ State energy efficiency standards are described in Energy Resources Conservation and Development Commission, February 1980, Conservation Division Regulations Establishing Energy Conservation Standards for New Residential Buildings and New Non-residential Buildings, California Administrative Code, Title 24.

- /13/ Mr. Swaim, San Francisco Water Department, telephone conversation, July 2, 1985.
- /14/ Nathan Lee, San Francisco Sanitary Engineer, telephone conversation, July 2, 1985.
- /15/ William McIntosh, PG&E, telephone conversation, May 10, 1985.
- /16/ Charles Colgate, Pacific Bell, telephone conversation, May 10, 1985.
- /17/ Letter from Lisa C. Hagel, California Archaeological Inventory, to Roxane Dal Porto, Department of General Services, January 4, 1985.
- /18/ Memo from Sally Maxwell, SFDCP to Roxane Dal Porto, Department of General Services, December 10, 1984.
- /19/ Grant Dehort, Foundation for San Francisco's Architectural Heritage, telephone conversation, December 3, 1984.

Appendix B

LEVEL OF SERVICE INTERPRETATION

<u>Level of Service</u>	<u>Description</u>	<u>Average Vehicle Delay (Seconds)</u>	<u>Volume To Capacity Ratio</u>
A	Free Flow. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Insignificant delays.	0-16	0.0-0.59
B	Stable Operation. An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles. Minimal delays.	16-22	0.60-0.69
C	Stable Operation. An occasional approach phase may become fully utilized. Most drivers feel somewhat restricted. Acceptable delays.	22-28	0.70-0.79
D	Approaching Unstable. Drivers may have to wait through more than one red signal indication. Queues develop but dissipate rapidly, without excessive delays.	28-35	0.80-0.89
E	Unstable Operation. Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection. Significant delays.	35-40	0.90-0.99
F	Forced Flow. Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections. Excessive delays.	40 or greater	1.00 and above

Source: "Highway Capacity Manual," Highway Research Board, Special Report No. 87, Washington, D.C., 1965.

"Interim Materials on Highway Capacity,"
Transportation Research Board, Circular No. 212,
Washington, D.C., January, 1980.

APPENDIX C

Downtown Plan DEIR Methodology

The Downtown Plan DEIR presents a refinement of the existing process in which projections of employment growth, are used to project future travel.

Future implementation of planned transit service improvement is assumed, as discussed in Appendix J of the Downtown Plan DEIR. These improvements would allow the transit system to keep pace with demand increases. The analysis anticipates that regional auto demand would continue to increase congestion on the bridges and freeways serving the City. The Downtown Plan DEIR analysis projects a shift in commuting forms from single-occupant auto use (driving alone) to transit use and ridesharing (carpool, vanpool).

The travel data in the Downtown Plan DEIR transportation sections (and in this report) are projections of total demand on the transportation system serving San Francisco. The projections are comprised of three components of travel demand. The first two components are C-3 District work (employee journey-to-work) travel and C-3 District non-work (all other) travel. The third component is non C-3 District travel, which was forecast through an analysis of regional trends adjusted for development in the C-3 District.

Although the C-3 District modeling process used analytical techniques common to travel forecasting, several portions of the process are unique to the C-3 District. This uniqueness results from the two major databases used: an inventory of existing land uses in the district and surveys of employees and employers in the district. The data developed from the surveys and the inventory have been used as the basis from which to make forecasts of development and employment growth in the C-3 District. The employment forecasts have been used as the basis for the travel demand modeling process. As previously described, the C-3 District travel comprised two of the three components of total travel.

Through a complex calibration and validation process of comparing projections of travel demand (modeling on the basis of the survey of C-3 District employees) to actual travel (from measures made by State, City and regional agencies), work and non-work travel demand from the C-3

District was modeled for the years 1984, 1990 and 2000. The modeling process is comprised of the following steps:

- Trip generation rates (empirical measures of total travel to and from a specific land use) were applied to employment forecasts by business activity (i.e., different rates were used for various land uses).
- The total travel from the C-3 District was distributed to seven Bay Area zones on the basis of projections for future employee residence patterns and origin-destination patterns for non-work travel.
- Trips to each of the seven regional zones were assigned to travel modes on the basis of modal splits (distribution of travel over the transportation modes, auto, transit, etc.) developed from the C-3 District surveys.

At this stage of the process, the model forecasts total travel from the C-3 District. To complete the process and allow analysis of the effect of C-3 District travel on the transportation network, the non-C-3 travel demand was analyzed. The total travel demand was calculated by summing up C-3 District and non-C-3 District work and non-work travel and non-C-3 District travel at sub-regional measuring points (called screenlines) located at or just beyond the San Francisco county lines (except for Muni and BART Peninsula service which was measured inside San Francisco, outside the downtown area). The total travel demand was then compared to available service (capacity) at the screenlines, and operating conditions (demand-to-capacity ratios) were analyzed assuming planned improvements. The results of these analyses are summarized later in this section.

For future years, the C-3 travel modeling process was modified to incorporate changes in travel patterns (modal split changes, different travel times), employee residence patterns and land use patterns. The process incorporates the dynamic aspects of changing Bay Area travel patterns, rather than remaining static over time. An example of past changes in travel patterns can be seen in the amount of carpooling activity on the Bay Bridge. In 1977, peak-period average vehicle occupancy westbound on the bridge was 1.7 persons per vehicle. By 1983, in response to increasing congestion and increased travel and parking costs, peak-period average vehicle occupancy westbound increased to 2.1 persons per vehicle. The non-C-3 travel demand was forecast through

the use of growth factor trends in regional and sub-regional travel.

The other process used to forecast cumulative transportation impacts starts with a list of cumulative office and retail development (net new office and retail space) proposed, approved, or under construction in the greater downtown area. From that list, using static employment densities or office and retail uses and established trip generation rates, forecasts of travel demand are made. The forecast travel is assigned to modes on the basis of static modal split factors (not assumed to change over time). The Guidelines for Environmental Review: Transportation Impacts (Department of City Planning, 1983, hereinafter called "Guidelines") describe the process and the data used to calculate transportation impacts.

Table 1 shows projections of year 2000 travel demand from the Downtown Plan DEIR. The Downtown Plan DEIR makes specific projections for C-3 District only. The Downtown Plan DEIR established 1984 as the baseline year and 1990 and 2000 as target study years. Growth estimates were made on the basis of projections for each of the target years. Studies for the Downtown Plan DEIR have confirmed that there is considerable travel between land uses in the downtown area.

The Downtown Plan DEIR travel demand model has refined the trip generation process by incorporating discounting factors that adjust the trip generation rates to give travel to and from the C-3 District as a whole; it does not include trips internal to the C-3 District. Thus, the DEIR forecasts closely resemble actual travel demand from downtown development.

TABLE 1

COMPARISON OF OUTBOUND PM PEAK-HOUR
CUMULATIVE TRAVEL FOR THE C-3 DISTRICT
PERSON TRIPS

	<u>Downtown Plan¹</u> <u>(1984-2000)</u>
Work Person Trips	41,400
Other Person Trips	<u>12,100</u>
Total Person Trips	53,500
Muni	
Northeast	1,600
Northwest	1,800
Southeast	1,100
Southwest	1,100
BART	
East Bay	11,800
Peninsula	2,400
AC Transit	200
GGT	
Bus	3,200
Ferry	800
SamTrans	1,200
SPRR/CalTrain	1,800
Regional Auto	
Golden Gate Bridge	410
Bay Bridge	1,250
U.S. 101	470
Interstate 280	470

¹ Travel from the C-3 District only. The analysis used in the Downtown Plan DEIR assumes regional travel growth not shown in the above data but discussed in the remainder of this section.

Source: San Francisco Department of City Planning, 299 Second Street EIR, Draft 83.311E, February 8, 1985, p. 93.

The Downtown Plan DEIR analysis has incorporated changes in both the regional trip distribution (reflecting projected housing availability) and the modal splits (reflecting projected availability of roadway and transit capacity in the future).

The Downtown Plan DEIR analysis has assumed that the modal split would change over time to reflect the increasing congestion at the regional screenlines. Thus, because the Bay Bridge eastbound is at or near capacity in the PM peak hour, the Downtown Plan DEIR modal split projects proportionately less auto demand to the East Bay than does the list-based analysis. Similarly, for AC Transit, the Downtown Plan DEIR recognizes that current regional transit policy dictates no increases in AC Transit transbay service and thus, AC Transit's ability to carry additional riders transbay will be restricted in the future. The changing modal split is a refinement that allows the travel mode to more accurately forecast travel demand. Thus, the Downtown Plan DEIR results represent a more accurate level of projection than has been possible to achieve using other methods and data available to date.

The Downtown Plan DEIR and the Consultant's Report on Downtown Growth Management Alternatives (Environmental Science Associates, 1983) contain extensive discussions of the analyses and data used to forecast employment, land use, and transportation demand.

APPENDIX D

FUNDAMENTAL CONCEPTS OF ENVIRONMENTAL NOISE

This section provides background information to aid in understanding the technical aspects of this report.

Three dimensions of environmental noise are important in determining subjective response. These are:

- a. the intensity or level of the sound
- b. the frequency spectrum of the sound
- c. the time-varying character of the sound

Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing.

The "frequency" of a sound refers to the number of complete pressure fluctuations per second in the sound. The unit of measurement is the cycle per second (cps) or Hertz (Hz). Most of the sounds which we hear in the environment do not consist of a single frequency, but of a broad bend of frequencies, differing in level. The quantitative expression of the frequency and level content of a sound is its sound spectrum. A sound spectrum for engineering purposes is typically described in terms of octave bands which separate the audible frequency range (for human beings, from about 20 to 20,000 Hz) into ten segments.

Many rating methods have been devised to permit comparisons of sounds having quite different spectra. Fortunately, the simplest method correlates with human response practically as well as the more complex methods. This method consists of evaluating all of the frequencies of a sound in accordance with a weighting that progressively and severely deemphasizes the importance of frequency components below 1000 Hz, with mild deemphasis above 5000 Hz. This type of frequency weighting reflects the fact that human hearing is less sensitive at low frequencies and extreme high frequencies than in the frequency midrange.

The weighting curve described above is called "A" weighting, and the level so measured is called the "A-weighted sound level," or simply "A-level."

The A-level in decibels is expressed "dBA"; the appended letter "A" is a reminder of the particular kind of weighting used for the measurement. In practice, the A-level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve. All U.S. and international standard sound level meters include such a filter. Typical A-levels measured in the environment and in industry are shown in Figure 1.

Although the A-level may adequately describe environmental noise at any instant in time, the fact is that the community noise level varies continuously. Most environmental noise includes a conglomeration of distant noise sources which create a relatively steady background noise in which no particular source is identifiable. These distant sources may include traffic, wind in trees, industrial activities, etc. These noise sources are relatively constant from moment to moment, but vary slowly from hour to hour as natural forces change or as human activity follows its daily cycle. Superimposed on this slowly varying background is a succession of identifiable noisy events of brief duration. These may include nearby activities or single vehicle passages, aircraft flyovers, etc., which cause the environmental noise level to vary from instant to instant.

To describe the time-varying character of environmental noise, the statistical noise descriptors L10, L50, and L90 are commonly used. The L10 is the A-weighted sound level equaled or exceeded during 10 percent of a stated time period. The L10 is considered a good measure of the "average peak" noise. The L50 is the A-weighted sound level that is equaled or exceeded 50 percent of a stated time period. The L50 represents the median sound level. The L90 is the A-weighted sound level equaled or exceeded during 90 percent of a stated time period. The L90 is used to describe the background noise.

As it is often cumbersome to describe the noise environment with these statistical descriptors, a single number descriptor called the Leq is also widely used. The Leq is defined as the equivalent steady-state sound level which in a stated period of time would contain the same acoustic energy as the time-varying sound level during the same time period. The Leq is particularly useful in describing the subjective change in an environment where the source

of noise remains the same but there is change in the level of activity. Widening roads and/or increasing traffic are examples of this kind of situation.

In determining the daily measure of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noises become very noticeable. Further, most people are sleeping at night and are very sensitive to noise intrusion.

To account for human sensitivity to nighttime noise levels a descriptor, Ldn, (day-night equivalent sound level) was developed. The Ldn divides the 24-hour day into the daytime of 7 a.m. to 10 p.m. and the nighttime of 10 p.m. to 7 a.m. The nighttime noise level is weighted 10 dB higher than the daytime noise level. The Ldn, then, is the A-weighted average sound level in decibels during a 24-hour period with 10 dBA added to the hourly Leqs during the nighttime. For highway noise environments the Leq during the peak traffic hour is approximately equal to the Ldn.

The effects of noise on people can be listed in three general categories:

1. subjective effects of annoyance, nuisance, dissatisfaction
2. interference with activities such as speech, sleep, learning
3. physiological effects such as startle, hearing loss

The sound levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Unfortunately, there is as yet no completely satisfactory measure of the subject effects of noise, or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance, and habituation to noise over differing individual past experiences with noise.

Thus, an important parameter in determining a person's subjective reaction to a new noise is the existing noise environment to which one has adapted: the so-called "ambient"

noise. "Ambient" is defined as "the all-encompassing noise associated with a given environment, being a composite of sounds from many sources, near and far." In general, the more a new noise exceeds the previously existing ambient, the less acceptable the new noise will be judged by the hearers.

With regard to increases in noise level, knowledge of the following relationships will be helpful in understanding the quantitative sections of this report:

1. Except in carefully controlled laboratory experiments, a change of only 1 dBA cannot be perceived.
2. Outside of the laboratory, a 3-dBA change is considered a just-noticeable difference.
3. A change in level of at least 5 dBA is required before any noticeable change in community response would be expected.
4. A 10-dBA change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response.

Source: San Francisco Department of City Planning, Fifth and Market Draft EIR, June 1, 1984, pp. 43 - 46.

A-WEIGHTED SOUND PRESSURE LEVEL, IN DECIBELS

	140	
	130	THRESHOLD OF PAIN
CIVIL DEFENSE SIREN [100']	120	
JET TAKEOFF [200']	110	ROCK MUSIC BAND
RIVETING MACHINE	100	PILE DRIVER [50']
DIESEL BUS [15']	90	AMBULANCE SIREN [100']
BAY AREA RAPID TRANSIT TRAIN PASSBY [10']	80	BOILER ROOM PRINTING PRESS PLANT
PNEUMATIC DRILL [50'] SF MUNI LIGHT RAIL VEHICLE [35']	70	GARBAGE DISPOSAL IN HOME [3'] INSIDE SPORTS CAR [50 MPH]
FREIGHT CARS [100'] VACUUM CLEANER [10'] SPEECH [1']	60	DATA PROCESSING CENTER DEPARTMENT STORE
AUTO TRAFFIC NEAR FREEWAY	50	PRIVATE BUSINESS OFFICE LIGHT TRAFFIC [100']
LARGE TRANSFORMER [200'] AVERAGE RESIDENCE	40	TYPICAL MINIMUM NIGHTTIME LEVELS-RESIDENTIAL AREAS
SOFT WHISPER [5']	30	
RUSTLING LEAVES	20	RECORDING STUDIO
THRESHOLD OF HEARING	10	MOSQUITO [3']
	0	

[100']-DISTANCE IN FEET BETWEEN SOURCE AND LISTENER

TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND INDUSTRY

Appendix E

AIR QUALITY

SAN FRANCISCO AIR POLLUTANT SUMMARY 1980-1984¹

	Federal ² Standard	State ³ Standard	1980	1981	1982	1983	1984
Pollutant							
<u>Carbon Monoxide (CO)</u>							
1-hour average (ppm)	35	20	10	8	—	—	—
Highest hourly average			0	0	0	0	—
No. of exceedances							
8-hour average (ppm)	9	9	7.5	5.3	9.0	5.1	10.8
Highest 8-hour average			0	0	1	0	1
No. of exceedances							
<u>Ozone (O₃)</u>							
1-hour average (ppm)	.12 ⁴	.10	0.09	0.07	0.08	0.13	0.10
Highest hourly average			0	0	0	1	0
No. of exceedances							
<u>Nitrogen Dioxide (NO₂)</u>							
1-hour average (ppm)	None	.25	0.17	0.1	0.13	0.13	0.14
Highest hourly average			0	0	0	0	0
No. of exceedances							
<u>Sulphur Dioxide (SO₂)</u>							
24-hour average (ppm)	.14	.05	0.018	0.010	0.011	0.018	0.033
Highest 24-hour average			0	0	0	0	0
No. of exceedances							
<u>Total Suspended Particulate (TSP)</u>							
24-hour average (ug/m ³)	260	100	103	106	117	NA	
Highest 24-hour average			0	0	0	0	NA
No. of exceedances							
<u>Annual Geometric Mean (ug/m³)⁵</u>							
Annual Geometric Mean	75	60	52.1	56.0	57.0	55.0	60.0
Annual Exceedances			No	No	No	No	1
<u>Lead</u>							
3-month average (ug/m ³)	1.5	None	0.53	0.35	—	—	—
Highest 3-month average			0	0	—	—	—
No. of exceedances							
1-month average (ug/m ³)	None	1.5	—	—	—	—	—
No. of exceedances	—	—	—	—	—	—	—

¹ 1980-1984 data collected at 900 - 23rd Street.

² Federal standard is not to be exceeded more than once per year. Annual average standards are not to be exceeded.

³ State standards are not to be equalled or exceeded. The state one-hour average CO standard was reduced from 40 ppm to 20 ppm in 1982.

⁴ The federal standard is given in terms of Expected Annual Excesses, which is based on a three-year running average.

⁵ The annual geometric mean is a single number which applies to an entire year of data. "No" indicates TSP concentrations did not exceed 60 (ug/m³).

Note: ppm = parts per million
 ug/m³ = micrograms per cubic meter
 mg/m³ = milligrams per cubic meter

Source: BAAQMD, Air Pollution in the Bay Area by Station and Contaminant, March issues, 1980-1985; and California Air Resources Board, California Air Quality Data, Annual Summaries, 1979-1982.

